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ABSTRACT

This report on adolescents, Acquired Immune Deficiency Syndrome (AIDS), and Human Immune Virus (HIV) infection had its beginning in the Knowledge Development Workshop "Issues in the Prevention and Treatment of AIDS Among Adolescents with Serious Emotional Disturbance," held June 9-10, 1988 in the District of Columbia. These papers are included: (1) "Emotionally Disturbed Adolescents and AIDS: An Introduction" (Jean Garrison Athey); (2) "AIDS Among Adolescent Subgroups: Inferences from Research and Theory on Delinquency and Sexuality" (Peggy C. Giordano and H. Theodore Groat); (3) "Barriers to Successful AIDS Prevention Programs with Runaway Youth" (Mary Jane Rotheram-Borus, Cheryl Koopman, and Jon Bradley); (4) "Issues in AIDS Prevention Among Juvenile Offenders" (Jon Rolf, Joy Nanda, Linda Thompson, Joyce Mamon, Anjani Chandra, Julie Baldwin, and Michael Delahunt); (5) "Prevalence of HIV-Related High-Risk Sexual and Drug-Related Behaviors Among Psychiatrically Hospitalized Adolescents: Preliminary Results" (Ralph J. DiClemente, Lynn Ponton, Diana Hartley, and Susan McKenna); (6) "High-Risk Youth Who Use Health Clinics: A Profile of a Population Accessible for AIDS-Related Interventions" (Arlene Stiffman and Felton Earls); (7) "AIDS and the Sexually Abused Adolescent" (Ann W. Burges and Carol R. Hartman); and (8) "Adolescents with AIDS in Foster Care: A Case Report" (Robert Jones, Bonnie Judkins, and Gary Timbers). A list of the speakers at the Knowledge Development Workshop is included. (ABL)

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TROUBLED ADOLESCENTS AND HIV INFECTION

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TROUBLED ADOLESCENTS AND HIV INFECTION

Issues In Prevention and Treatment

Co-Edited by

John O. Woodruff
Diane Doherty
and
Jean Garrison Athey

October, 1989

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PREFACE

Georgetown University is pleased to have been able to collaborate with the National Institute of Mental Health in the preparation and publication of this monograph. This project was made possible through an interagency agreement between the Child and Adolescent Service System Program, National Institute of Mental Health, and the Division of Maternal and Child Health, U.S. Department of Health and Human Services, and the Georgetown University Child Development Center.

In recent years, concern about the spread of HIV infection among adolescents has grown, particularly as a result of the increased awareness that many of the young adults with AIDS were likely infected as adolescents. Concern about the spread of HIV among adolescents has invigorated examination of the issues relevant to HIV infection and adolescents and has brought many of those working with adolescents to a new understanding of the complexity of those issues.

This monograph had its beginning at the Knowledge Development Workshop, "Issues in the Prevention and Treatment of AIDS Among Adolescents With Serious Emotional Disturbance," held June 9 and 10, 1988 in Washington, DC, and sponsored by the Children and Youth At Risk Project of the Georgetown University Child Development Center and the Child and Family Support Branch of the National Institute of Mental Health. The meeting brought together a diverse group of experts working with troubled adolescents in a variety of settings and under a wide range of circumstances and provided them with the opportunity to share the data, information and experience they had developed with respect to adolescents and HIV infection.

The purpose of this monograph is to initiate further discussion and examination of some specific issues associated with HIV infection and troubled, or emotionally disturbed, young people in order to facilitate the prevention and treatment of HIV infection among adolescents. Unfortunately, it is impossible to comprehensively cover all or even many of the issues relevant to HIV infection and troubled adolescents in a single volume. The Child Development Center views this monograph as a beginning--a springboard--for further research, discussion, and action designed to assist those who work with troubled adolescents in the process of developing effective prevention, education and treatment programs and strategies that will limit the spread of the HIV epidemic.

On behalf of the Child Development Center and NIMH, I would like to thank all of the conference participants whose concern and dedication made this document possible. Jean Garrison Athey of NIMH and Diane Doherty and John Woodruff of Georgetown University deserve special mention for the expertise and attention they brought to the process of substantive editing and topic selection. I would also like to thank Jane Myers of Janus Associates and Kathleen McGhee of Georgetown for their meticulous and expert editing of the text and references. Finally, recognition and thanks go to the support staff at the Child Development Center that made the meeting a success, and specifically to Gail Ellison and Kathleen McGhee who patiently compiled and proofread the manuscript.

Phyllis Magrab, Ph.D.
Director
Georgetown University Child Development Center
October, 1989

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EMOTIONALLY DISTURBED ADOLESCENTS AND AIDS: AN INTRODUCTION

Jean Garrison Athey, Ph.D.

This monograph examines issues associated with emotionally disturbed adolescents and their risk of infection with the human immunodeficiency virus (HIV) that causes AIDS. "Emotionally disturbed," however, is not well-defined, nor does it describe a specific condition. The Child and Adolescent Service System Program (CASSP) of the National Institute of Mental Health defines the term somewhat flexibly to include level of functioning (specifically, the ability to perform in the family, in school, or in the community), need for services from two or more agencies (such as mental health, substance abuse, health, education, juvenile justice, or social services), and a diagnosable problem. Since diagnoses of childhood mental disorders typically suffer from both validity and reliability problems, CASSP emphasizes level of functioning and need for services in its discussions of "severely emotionally disturbed" adolescents. Some people prefer to use the term "troubled" for this same group of adolescents.

Sometimes an adolescent's emotional problems are difficult to disentangle from behavior related to the service setting or living situation. Consequently, adolescents with emotional disturbances may not be so identified and they may not be served by mental health agencies. It is important to remember, particularly with regard to HIV infection, that emotionally disturbed adolescents also have other characteristics. Some emotionally disturbed adolescents are gay and engage in high-risk sex, some live in geographic areas where the virus is endemic, some are prostitutes, some are "throwaways," some have been sexually abused and/or exploited, and some are all of these.

The purpose of this monograph is to initiate a discussion of issues particularly relevant to HIV infection and troubled adolescents identified in various ways. Chapters focus on adolescents in the juvenile justice system, on the streets, in a psychiatric hospital, in foster care, and in lowincome health care clinics, and on adolescents who have been sexually abused. Focused and effective prevention strategies and sensitive treatment programs require an understanding of the special situations and needs of these different subpopulations of adolescents.

The AIDS Epidemic and Adolescents

Strong evidence suggests that many adolescents have already become infected with HIV and that many more are at high risk for acquiring it, although no data exist on the prevalence of HIV infection among emotionally disturbed adolescents. Two types of information are particularly relevant in examining the question of whether concern about adolescents is warranted: statistical data on AIDS cases and seropositivity rates and information on behaviors that may put adolescents at risk of infection.

Data on AIDS Cases and HIV Seropositivity Rates

The Centers for Disease Control (CDC) keeps track of the number of cases of AIDS that occur throughout the country. As of March 1989, 359 adolescents age 13 to 19 had been reported to the CDC as having AIDS (CDC 1989). Clearly, this relatively low number by itself would not suggest a major problem for adolescents. However, the latency period of the virus is now estimated to average about 8 years; thus, HIV infection in most cases would not produce illness and be reflected in CDC statistics until the adolescent was a young adult. As of March 1989, the CDC reported 18,800 cases of AIDS among persons age 20 to 29.

The most accurate estimate of the scope of the HIV problem would be obtained through a national, randomized seroprevalence survey of adolescents. Such a survey would identify youth who are infected with the virus but not yet symptomatic and thus not reported to the CDC. Due primarily to the methodological difficulties in designing such a study, to date none has been undertaken, although seroprevalence studies of college students are underway.

The Job Corps began testing for HIV antibodies in applicants in 1987; the sample is a national one, although the population tested is not representative of adolescents generally. About two-thirds of the applicants are male, and about two-thirds belong to ethnic minority groups; most are economically and educationally disadvantaged. Preliminary analyses of the data show that the seroprevalence rate for October 1987 through July 1988 was 3.6 per thousand (Haymon and St. Louis 1989).

When the Job Corps data were stratified in certain ways, they yielded a picture that is particularly tragic for some groups. Age, residence, minority status, and gender were all correlated with higher rates. The older the applicant, the more likely to be infected, a finding that one would intuitively expect since the older adolescent would have had more time to be exposed to the virus.

Residence was highly correlated with the infection rate; this finding would also be expected since acquisition of HIV is a function of both behavior and geography. Blood or semen exchange with another person may be comparatively safe in areas where the virus is not prevalent, but extremely dangerous where it is endemic. Job Corps recruits from certain East Coast cities were much more likely to be seropositive.

Minority status also led to higher seropositive rates, with blacks having the highest rates. Males were more likely to be seropositive than females, although not by much. The rate for males was 4.8 per thousand and 3.7 per thousand for females.

A young person with a combination of high-risk variables is particularly vulnerable; for example, a 20-year-old black male Job Corps applicant from a high incidence East Coast city would have about a 3-percent chance of being seropositive in 1988. These statistics suggest an epidemic that has already moved heavily into the adolescent population, with certain subgroups being at extremely high risk of infection.

Sexual Activity of Adolescents

Another indication of the potential for HIV infection among adolescents can be obtained by examining the data on behavior that may put them at risk--principally sexual activity and drug use. Adolescents commonly engage in sexual activity. The average age at which young women first have intercourse is 16.4 for whites and 15.5 for blacks (Zelnik and Kantner 1980). In some communities, it may be as low as 12 (Clark et al. 1984). The trend is for increasingly younger teens to become sexually active (Hofferth et al. 1987). By the age of 19, almost 7 out of 10 girls and 8 out of 10 boys have engaged in intercourse (Mott and Haurin 1988).

The pregnancy rate also indicates a high level of sexual activity, combined with a low rate of contraceptive use; in 1981, 43.5 percent of all girls became pregnant by the age of 20 (Hayes 1987). Adolescents rarely use condoms (Nicholas et al. 1989), which also provide a large measure of protection against AIDS. Among certain population subgroups, anal intercourse, a particularly high-risk sexual activity, has become an acceptable and standard way for girls to maintain their virginity. Receptive anal intercourse is also practiced by some gay youth and by some street youth engaged in prostitution for survival.

The rate of sexually transmitted diseases (STDs) other than AIDS among adolescents is important since it provides a model of how AIDS might spread. Moreover, certain STDs increase the likelihood of contracting HIV if exposed because the presence of lesions provides another entry to the bloodstream. Recent studies have shown that, of all age groups, STD rates are highest among adolescents, then decline dramatically with age (Shaffer 1986; Bell and Holmes 1984; Metropolitan Insurance Company 1986). Each year, one in seven teenagers contracts an STD (Mantell and Schinke 1988). Almost one-fourth of all teenagers will acquire an STD before graduating from high school (NCHS 1982). In short, STDs other than AIDS are very common among adolescents.

Drug Use Among Adolescents

Drug use is significant in the transmission of AIDS for two reasons: the sharing of hypodermic syringes efficiently transmits the virus, and drug use lowers inhibitions, making the use of safe sex techniques less likely. And service providers increasingly report that young people addicted to drugs, particularly crack cocaine, trade sex for crack or prostitute themselves to obtain money to buy the drug.

Nationally, the rate of intravenous (IV) drug use among adolescents is not believed to be extremely high. A 1988 random survey found that 1.1 percent of high school seniors reported having ever used heroin (NIDA 1989). While this suggests that IV drug use has a relatively low incidence among adolescents, the problem may be larger than these data indicate, since out-of-school populations are probably at greater risk for IV drug use than students, and they were not included in the survey. As many as 15 percent of adolescent males from some inner cities have used heroin (Brunswick and Messeri 1986). Cocaine is also sometimes injected intravenously. A 1988 survey found that 12.1 percent of high school seniors reported having used cocaine (NIDA 1989). Once again, the rate for dropouts and for inner city youth is likely to be much higher, particularly given the recent crack epidemic. In short, the extent of IV drug use as a major risk factor for the spread of AIDS among adolescents is unclear. As a direct cause, on a national level, it is almost certainly of much less importance than sexual activity.

Even if adolescents themselves do not inject drugs intravenously, they may engage in sex with persons who do. One study (Nicholas et al. 1989) found that teenagers who reported IV drug use were also more likely to report large numbers of sexual partners. Males generally begin to use drugs at younger ages than girls, and males have higher rates of drug use than females (Mott and Haurin 1988). Moreover, adolescent girls generally have sexual partners older than themselves; girls' partners at first sexual intercourse average about 2 years older (Zelnik and Kanter 1980). To the extent that adolescent and young adult males are using IV drugs and becoming infected with HIV, they are probably infecting their younger, adolescent female sex partners.

In sum, adolescents appear to be a very high-risk group for HIV infection, although, given the latency of the virus, only a small proportion of those who become infected in adolescence will become symptomatic as adolescents.

Emotionally Disturbed Adolescents at Risk for AIDS

Emotional disturbance may or may not place an adolescent at greater risk for AIDS. No studies have documented the relationship between emotional disturbance and AIDS or HIV infection. Nor have any studies examined whether emotionally disturbed adolescents engage in those sex and drug behaviors that would place them at particular risk for AIDS.

However, large numbers of emotionally disturbed adolescents probably are at heightened risk; many have low levels of impulse control or lack the ability to assess the riskiness of a given act or to act on such assessment. Some disturbed adolescents may "self-medicate" with drugs and put themselves at risk for AIDS through needle sharing. Those with conduct disorders may, as a function of this disturbance, engage in a constellation of "acting out" behaviors, which may include promiscuous sex or drug use. These adolescents would appear to be at heightened risk of HIV infection.

Disturbed adolescents frequently run away or are "pushed out." The runaway and homeless youth population comprises as many as 1.3 million adolescents per year (Chelimsky 1982), including a high percentage with serious emotional problems. A study (Shaffer and Canton 1984) in New York City found that their sample of runaways had a psychiatric profile largely indistinguishable from that of adolescents attending an outpatient clinic. Drug abuse is reported to be very high among the runaway population (Yates et al. 1988) as is sexual experience, much of it exploitative. In fact, many homeless adolescents are forced to trade sex for survival needs (Robertson 1989). Such adolescents are also often prey to sexual victimization, once again increasing their vulnerability to AIDS.

Many youths in the juvenile justice system are emotionally disturbed (Friedman et al. in press). Their drug abuse is high, and the average age of first intercourse for this population was found in one study to be 12 (Hein 1989).

In sum, the behavior of many adolescents with emotional disturbance and/or the dangerous settings in which many of them live may place them at special risk for acquisition of HIV, although it has not been empirically demonstrated that emotional disturbance per se is a risk factor for HIV infection.

The Mental Health Service Provider Role

Because AIDS is incurable and fatal, no medical means of preventing its spread exists, and only limited treatment is available. AIDS is not so much a medical problem as a social and behavioral one. If persons responsible for the care and treatment of emotionally disturbed adolescents are genuinely concerned about these youth, they will take AIDS prevention extremely seriously. Without some intervention, many of these youthful clients are at great risk of dying very young. In addition, youth who know they are seropositive and those who are symptomatic have emotional needs different from and beyond their preexisting disturbance, and addressing these needs is within the purview of mental health providers. In short, AIDS prevention and AIDS supportive services have become a necessary complement to mental health services for emotionally disturbed youth because the disturbance may be manifested in high-risk behavior and may lead to adolescents being in high-risk environments, because AIDS is as much a behavioral and social issue as a medical one, and because mental health providers have primary responsibility for these young people.

State agencies have been loathe to deal with issues of sexuality. For example, a 1987 study (Polit et al.) of public child welfare agencies in 48 states found that only 2 had comprehensive policies for meeting the sexual development and family planning needs of teenagers in foster care. This occurred despite the fact that adolescent child welfare clients are at higher than average risk of early unintended pregnancy and that the only study on this topic found that most teens in State custody receive no guidance in sexual matters (Danzinger et al. 1980). Now that the stakes have been raised so dramatically with AIDS, to ignore sexual activity and IV drug abuse among adolescents has become unconscionable.

The participants at the workshop on which this monograph is based made a number of recommendations for mental health service providers focused on prevention, services for seropositive youth, and services for youth who are symptomatic.

Prevention

In once sense, AIDS education for prevention of infection is no different for emotionally disturbed adolescents than for other adolescents. It must include the following elements:

> (1) Accurate, up-to-date information on the epidemic. Most adolescents have by now heard about AIDS, but misinformation abounds. In addition, scientific information about AIDS continues to grow, and new things are being learned daily. To be credible, an AIDS educator must know the facts, including questions for which we as yet have no good answers.

(2) Skills training. Ample documentation shows that behavior change for health reasons requires more than information, particularly with respect to sexual and drug behavior. Skills training is essential, and it should include opportunities for role-playing situations that are potentially dangerous, such as sexually-pressured ones.

(3) Resources. Adolescents do not always have the resources to follow through on AIDS prevention. For example, some adolescents may not have the money to buy condoms should they decide to use them to lower their risk for AIDS. An effective prevention program would consider the obstacles adolescents face and ensure access to the necessary resources.

(4) Peer group change. Changes in health practices are generally much more successful when the individual's referent group accepts the new practice as the norm. Adolescents are particularly susceptible to peer group pressures. Effective prevention programming should thus identify ways to influence peer leaders to support prevention practices.

In addition to these basic elements of prevention education, mental health service providers should tailor their prevention programming for the highest risk adolescents including, in particular, adolescents with conduct disorders, sexual abuse victims and/or perpetrators, and sexually exploited youth. Serious AIDS prevention efforts will also take into account the living situation of the adolescent. Education will have little impact on a youth whose only way to obtain a room for the night or a meal for the day is through selling his body. Clearly, every effort must be made to help these adolescents find alternative ways to meet their basic needs. And finally, programs that enhance adolescents' life options and improve self-esteem, while not a direct AIDS prevention activity, may be extremely important in motivating adolescents to take the necessary steps to avoid infection. It stands to reason that young people who have a positive sense of their future and a belief in their own worth have something to live for.

Working with Emotionally Disturbed HIV-Positive Youth

While most youths who are HIV positive are unlikely to be aware of it until they become ill, typically in their early twenties, some will know their status. Both the military and Job Corps test all applicants, for example, and youth rejected for either of these because of HIV seropositive status will be so informed. Some youth also request testing on their own. Those youth who test positive must then deal with stigma and rejection; fears of illness, disfigurement, and death; the implications of HIV infection for intimacy and sexuality; and an extremely foreshortened future. Many also encounter discrimination in housing and employment. For adolescents who are already emotionally disturbed, such an additional burden may well exacerbate their original disturbance as well as create new ones.

Mental health services must be augmented to focus on HIV-related issues, and counseling must be long-term and supportive and focused on improving the youth's quality of life. Counseling should include suicide risk assessment and AIDS risk-reduction strategies (for self and others), should be integrated with peer support groups, and should include family intervention where possible. In fact, seropositive youth need access to a comprehensive and sensitive system of care that addresses their individual needs. Emotionally disturbed girls who give birth to HIV-positive babies will need very special support.

Since many emotionally disturbed youth are placed in out-of-home care, mental health providers also need to consider policies for residential care for HIV-positive youth. Legal, ethical, medical, and social factors have to be taken into account. Mental health service providers may want to consult the Child Welfare League of America's recently published guidelines for residential care facilities for HIV-positive youth.

Working with Emotionally Disturbed Youth with AIDS

While the number of emotionally disturbed youths who develop AIDS will likely remain low because of the long latency of the virus, as the epidemic progresses this number will increase. Those who actually become ill will likely be those who have the fewest resources--those who have been on the streets from a very early age. These youth need not only supportive counseling, but many other services as well. Case management is essential to ensure that they have access to medical care and can follow through on health care requirements, that their food and shelter needs are met, and that they receive ongoing emotional support that provides them with nurturance and dignity. Ideally, these services should be built on existing general programs that are community based (and the same structures and mechanisms which have been developed in some places to coordinate other services need to be utilized for this problem). In addition, new services may need to be developed to address the multitude of needs of emotionally disturbed adolescents with AIDS.

Conclusion

HIV infection and AIDS have already affected many emotionally disturbed adolescents, and without aggressive intervention, the prognosis for the future is rather bleak. Mental health providers must not disregard this issue, either out of ignorance or fear or out of a belief that it is not a mental health issue. At the same time, AIDS is not something that such agencies can handle effectively alone. As in other areas, collaboration and coordination of efforts is essential. Prevention and services, however, cannot be left for someone else to do--no one else is doing it. Mental health service providers can make a difference in preventing infection and in helping youth who are already infected live out their lives with dignity and support.

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CHAPTER 1

AIDS AMONG ADOLESCENT SUBGROUPS: INFERENCES FROM RESEARCH AND THEORY ON DELINQUENCY AND SEXUALITY

Peggy C. Giordano, Ph.D., and H. Theodore Groat, Ph.D.

This chapter examines potential linkages between serious emotional disturbance (SED) in adolescence and increased exposure to AIDS, and considers special issues in the way such disturbed youth may receive or fail to receive AIDS prevention messages.

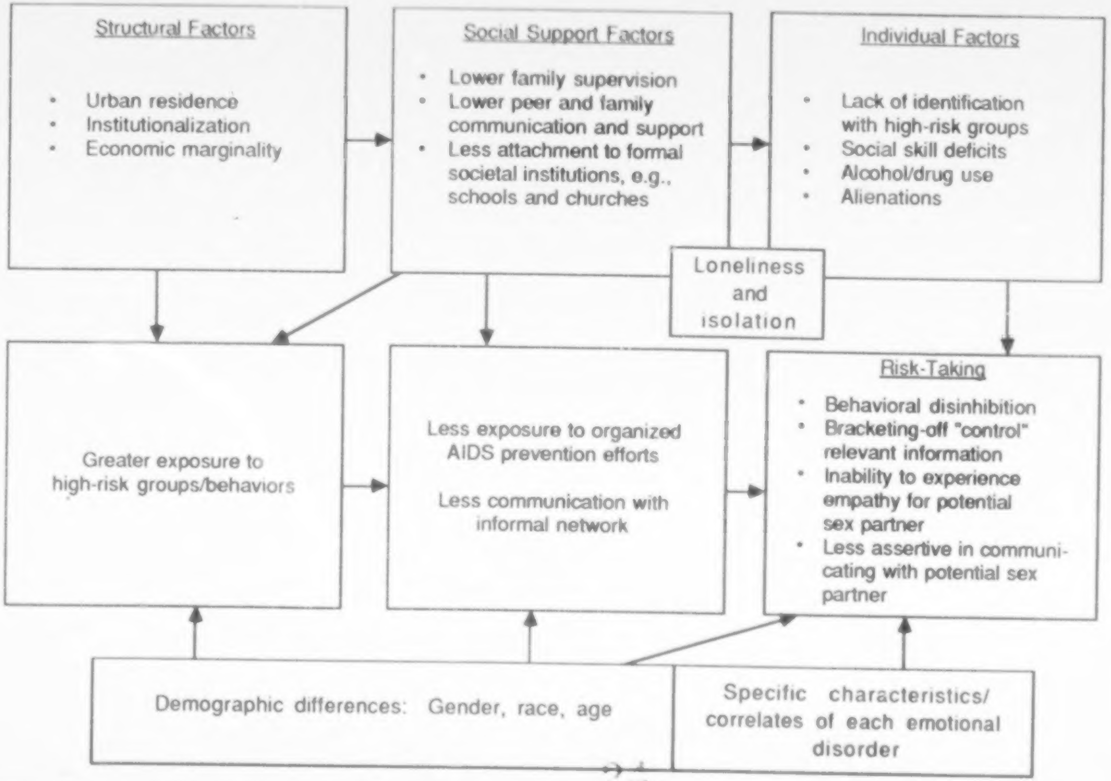
Findings from the delinquency and adolescent sexuality literature can be useful starting points for understanding more about the nature of this risk. It is also important to consider problems or gaps in this research, since these have implications for future research and policy as they relate to the AIDS-SED connection.

The Syndrome Assumption

A strongly held belief that appears frequently in the adolescent problems literature is that many youth problems tend to cluster, or form a "syndrome" of behaviors (Osgood et al. 1988). This suggests two important things: (1) problem behaviors tend to combine at the individual level, and (2) a single underlying cause or set of causes is likely to explain more than one kind of problem. This approach is especially associated with the work of Jessor and Jessor (1977), who argued that not only are the various problem behaviors intercorrelated, but that a single set of factors and resulting "unconventionality" directs behavior across a variety of different domains (e.g., the same factors that explain the onset of early sexual activity will also be implicated in delinquent behavior). Research programs that emphasize the linkages between drug use and crime or suggest that delinquents score higher than others on depression are consistent with the syndrome assumption. An examination of the links between AIDS and serious emotional disturbance could be considered an extension of this syndrome logic. However, these syndromes have not been adequately established empirically, particularly within nonclinical populations. More research is critically needed that examines similarities as well as identifiable differences in the causal paths to these various problems among adolescents, ideally within the same study sample. Pointing to positive correlations between different kinds of problem behaviors (e.g., sex and delinquency) obscures potentially important subgroup differences. Further, true multiple-problem youth need to be explicitly compared with youth involved with only one sort of problem. Finally, the tendency for problem behaviors to cluster may itself vary systematically with characteristics such as gender and race (e.g., early sexual debut might be found as part of a larger syndrome for males, but less so for females; blacks' sexual patterns may not be as strongly correlated as whites' sexual patterns with general nonconformity).

With this strong caveat in mind, we focus on a number of possible ways in which serious emotional disturbance in adolescence may affect a youth's probability of exposure to AIDS, including barriers to the effective transmission of AIDS prevention messages. These possibilities are offered as conceptual linkages that warrant further research, rather than as definitive propositions. While it is convenient to speak of SED youth as a single category, an important part of any future research agenda should be the specification of which (if any) kinds of SED and behavior are more closely linked to these factors. We examine possible linkages at three different levels: structural, social, and individual. These conceptual categories are shown schematically in Figure 1. In addition, we address the importance of understanding how such demographic categories as age, race, and gender may affect these interconnections.

Figure 1. Factors That Potentially Increase the Vulnerability of SED Youth to HIV Infection and Inhibit the Reception of AIDS Prevention Messages


Structural Factors
• Urban residence
• Institutionalization
• Economic marginality
Social Support Factors
• Lower family supervision
• Lower peer and family communication and support
• Less attachment to formal societal institutions, e.g., schools and churches
Individual Factors
• Lack of identification with high-risk groups
• Social skill deficits
• Alcohol/drug use
• Alienations
Loneliness and isolation
Greater exposure to high-risk groups/behaviors
Less exposure to organized AIDS prevention efforts
Less communication with informal network
Risk-Taking
• Behavioral disinhibition
• Bracketing-off "control" relevant information
• Inability to experience empathy for potential sex partner
• Less assertive in communicating with potential sex partner
Demographic differences: Gender, race, age
Specific characteristics/ correlates of each emotional disorder

Structural/Environmental Factors

Routine activities theory from the criminology literature offers a useful orienting framework for organizing and understanding the potential role of structural variables. This approach, delineated first by Cohen and Felson (1979), has been used primarily in predicting the kinds of people most likely to be at risk for victimization, principally in the context of traditional predatory street crimes. Watney (1988), however, pointed out serious problems in conceptualizing the AIDS phenomenon generally in terms of the innocent and the guilty, or the perpetrators and the victims.

For our purposes, perpetrators may be redefined as simply individuals known to be at higher risk for carrying the human immunodeficiency virus (HIV). Cohen and Felson suggested that for successful victimization to occur, three elements are necessary: (1) likely perpetrators and (2) suitable targets (3) in the absence of capable guardians. The importance of the routine activities approach is that it points up how the simple intersection in time and space of these three elements can affect the incidence of crime, quite apart from the motivational or other psychological characteristics of individual actors.

With respect to the AIDS issue, even though seriously emotionally disturbed adolescents are not a priori at higher risk than other adolescents, they may be located differentially where there are, in fact, greater concentrations of high risk populations. These areas of structural or environmental overlap may place emotionally disturbed adolescents at higher risk. For example, persons suffering from certain kinds of psychiatric disorders are disproportionately found in lower socioeconomic status (SES), predominantly urban areas (Dohrenwend 1975). Similarly, particular categories of youth, such as runaways, are drawn to and cluster in large metropolitan areas (Brennan 1978) and officially recorded delinquency is strongly correlated with population density (Binder et al. 1988).

Further, Hogan and Kitagawa's (1985) analysis of premarital pregnancy among black teenagers in Chicago showed the strong influence of nonintact families, lower social class, and poor, highly segregated neighborhoods. Indeed, these researchers estimated that 57 percent of the teenage girls from high-risk environments (lower class, ghetto residence, mother-headed family, five or more siblings, a sister who is a teenage mother, and loose parental supervision of dating) will become pregnant by age 18 in contrast to only 9 percent of girls from low-risk environments.

A second structural association among high-risk groups, behaviors, and SED youth is the greater likelihood that emotionally impaired or problem youth will spend some portion of their adolescence in an institutional setting. The patterns of dominance and manipulation that often involve homosexual behavior are well documented in studies of both male and female institutions (see Bartollas et al. 1976; Propper 1981).

A third structural characteristic is, for at least some categories of SED youth, economic marginality. Stressful economic circumstances increase the probability that at least some youths may become involved in situational prostitution, homosexuality, or drug-related behaviors as a survival strategy on the street. Yablonsky and Haskell (1988), for example, detailed how "runaways living in parks and building hallways become involved with drugs and prostitution." An important aspect of such youths' involvement may be its sporadic or situational character. To illustrate, Allen (1980), in developing a typology of male prostitutes, suggested that full-time prostitutes were not the most common pattern he identified. Instead, part-time hustlers, or delinquents who engaged in a variety of other illegal actions, were the model type. Miller (1986), in her ethnographic account of street women, also emphasized that many women in her sample engaged in prostitution as part of a larger deviant street network, which may also include involvement in "petty larceny, forgery, credit card fraud, embezzlement, auto theft, drug traffic, burglary, and robbery" (p. 35).

The above structural features are important because they suggest that SED youth may have increased exposure to AIDS unrelated to individual differences or motivational states that derive directly from their illnesses or problems.

Social Support Systems

While theories and research differ on the specific role played by social support networks in the etiology and course of mental disorders or other youth problems, most researchers find some association between social support characteristics/deficits and SED.

Briefly, these studies suggest first that at least some categories of SED youth may have less family supervision. This relates to Cohen and Felson's third element required for successful victimization (viz., the absence of capable guardians). Hence, some youth may be at higher risk because of the lower degree of external control over their behavior/movements in general and over their sexual activities in particular.

The importance of reduced internalized and external control over behavior is an important element in social bonding theory (Hirschi 1969), and empirical linkages have often been demonstrated between level of supervision and delinquency (Cernkovich and Giordano 1987). But, as Hofferth (1987) noted, the literature on the relationship between parental supervision/control and "initiation of sexual activity is not clear-cut in the data."

> Hogan and Kitagawa found in a sample of black teenage girls that more supervision was associated with less sexual activity. Inaza and Fox (1980), and Newcomer and Udry (1984), in contrast, found that more supervision was not related to initiation of sexual activity. Without knowing more about the degree and type of supervision and the amount and type of sexual activity, it is not really possible to make any generalizations about the impact of parental supervision. More work is needed on this issue, since it is one over which parents have some control. (Hofferth 1987).

Nonetheless, as Wilson (1987) pointed out, the fact that premarital parenthood among black teens who live with both their single mothers and one or more grandparents (usually grandmother) is as low as that among teens in husband-wife families suggests that the main effect of one-parent families on teenage pregnancy is not so much the mother's example as the greater difficulty of parental supervision in one-adult families. More research is needed that examines the specific conditions under which parental supervision affects adolescent sexual behavior.

In addition to level of family supervision, there is evidence that SED youth may have less social support, measured in terms of both family and peer relationship intimacy. Negative or inadequate peer relations have been associated with mental health status. Cowen et al. (1973), for example, found that "negative childhood peer ratings" were the best predictor of adult mental health status.

The literature on the relationship between family intimacy and mental health outcomes is even more voluminous. Family problems have been linked to general assessments of emotional difficulty (Miller 1974; Schoolar 1973) and to more specific problems such as suicide (Harry 1983), schizophrenia (Klein and Erlich 1978), anorexia (Carlson 1983), and depression (Philips 1979). Recent work in the delinquency field, however, suggests that these "negative peer and family" assumptions do not apply equally well to all problem behaviors. For example, we found that the peer relations of the most delinquent youth in our sample were no less intimate than were those of their less delinquent counterparts (Giordano et al. 1986).

Similarly, the research on adolescent sexuality has taught us that it is too simplistic to argue that high levels of family communication will necessarily inhibit an adolescent's involvement in sexual behaviors. As Newcomer and Udry (1985) pointed out, in spite of the belief that "adolescents who talk with their parents about sex-related issues will be 'more responsible' in their sexual behavior," several studies suggest very little effect (Cvetkovich and Grote 1983; Furstenberg et al. 1984). Newcomer and Udry's (1985) own conclusion was that neither parental attitudes toward premarital sex nor parent-child communication about sex and contraception appear to affect teenagers' subsequent sexual and contraceptive behavior. But while the links between network intimacy/communication and behavior may not be as simple or direct as previously thought, both parents and peers remain as important references to adolescents (Youniss and Smollar 1985). Either network could be an important source of information about AIDS issues, including specific safe sex practices. Thus, to the degree that SED youth are less intimately connected to social networks, they may be more vulnerable.

Research shows that in addition to weaker informal support networks, psychological distress and other problem behaviors are also associated with more tenuous bonding to formal societal institutions such as schools and churches. For example, delinquents are more likely than others to have high rates of truancy from school, to dislike school authority figures, and to drop out altogether. They also are less likely to participate in the kinds of extracurricular activities through which AIDS awareness programs could be offered. School-centered prevention activities are less likely to be effective for those adolescents whose problem behavior is correlated with high levels of alienation or distancing from school settings.

Finally, the lack of strong social supports can also play a role in the increased loneliness or isolation that are a direct result. Indeed, scales measuring some types of psychological distress (e.g., depression) often include items that index a subjective experience of loneliness or isolation. As Williams and Solano (1983) pointed out, it is important to uncover not only the existence of loneliness as a state wherein "...the individual perceives a discrepancy between the two factors, the desired and achieved pattern of social relations" (Peplau and Perlman 1982, p. 5 as quoted in Williams and Solano), but to focus on the actual social behavior of lonely people.

Williams and Solano found that lonely people did not have fewer friends, but there was a perceived lack of intimacy. They also noted that other researchers have found lonely persons spend more time alone and date less often. Thus both the subjectively experienced state and the less satisfactory relationships may make some youth more vulnerable to sexual experiences that do not fit the normative timing or pattern of more conventional youth behavior. These feelings may also inhibit such youth from aggressively quizzing potential intimate partners about their past sexual or drug histories.

Individual Factors

Thus far, we have identified factors in the structural environments or more immediate social networks of emotionally disturbed adolescents that may place them at greater risk for AIDS exposure. However, a broadly sociological focus should not obscure the potential role of individual, social psychological differences. One of the most significant of these individual differences is that emotionally disturbed youth may disproportionately lack identification with the high-risk groups to which AIDS prevention messages are directed, even though they may be engaging in behaviors that are actually high risk. A team of British researchers essentially made this point in their recent qualitative study of young peoples' beliefs about HIV infection and AIDS. They noted:

> ...since there is now considerable evidence to suggest that many men who participate in homosexual acts do not consider themselves

> to be anything other than heterosexual...our findings raise important questions about the relationship between identity and risk perception (Warwick et al. 1988, p. 119).

This is an important point in relation to SED youth because such youth--if they engage in high-risk behaviors without identifying with known high-risk populations--may be more vulnerable than if they were part of an established, self-identified network (e.g., gays, professional prostitutes, or drug users who may already be well aware of AIDS facts and prevention measures). The situational, sporadic, and experimental nature of some high-risk behaviors of SED youth, such as homosexual behavior in an institutional setting, infrequent prostitution, or having sexual relations with an intravenous (IV) drug user, make this lack of identification especially problematic.

There may also be a correlation between certain types of SEDs and social skill deficits. Short and Strodtbeck (1965), for example, suggested that the Chicago gang youth they studied were characterized by social disability--a lack of social ease and verbal facility, a feeling of discomfort in communicating with others outside their immediate sphere. More recently, researchers such as Patterson (1982), Dishion et al. (1984), and Kaplan and Arbuthnot (1985) have elaborated this view. Dishion and colleagues summarized the logic underlying this research:

> The recent proliferation of social skills training in juvenile delinquency treatment procedures (e.g., Spence and Marzillier 1981; Collingwood and Genter 1980) demonstrates the widespread concern for the interpersonal incompetence of antisocial adolescents and its long-term effects for this group of youths. Interpersonal skill deficits may be conceptually classified into two interrelated aspects: (a) the interpersonal style of the individual, which may have the effect of social rejection (e.g., abrasiveness, obnoxious behavior, or extreme shyness), and (b) the style of interpersonal problem solving, which may result in the ineffective resolution of social dilemmas (e.g., conflict with parents, resisting tempting situations, avoidance of possible problems). There is some evidence that anti-social adolescents are lacking in both these aspects (1984, p. 39).

The need for more research, particularly explicit comparisons across different categories of problem youth, cannot be overemphasized. The image of the delinquent as isolate and misfit is simply not supported by the data. Nevertheless, some specific aspects of personal interaction style or modes of problem solving may be of great importance. Dishion et al. (1984) looked at seven different measures of social skills and found that the highest correlation with delinquency was mother's rating of homework skills (which cannot really be considered a social skill deficit). But "an unanticipated result was the lack of relation found between the mother's global report on interpersonal skill and the two criteria of delinquency" (p. 51). On the other hand, the problem-solving skill measure was correlated with delinquency. [Note: the measure contained too many references to delinquency to offer a definitive test.]

More recent work that includes highly differentiated scales measuring different aspects of interpersonal negotiation strategies may be most useful in this regard, particularly if comparison groups are included. Leadbetter et al. (1988), for example, found interesting differences in types of behaviors (e.g., correlations were strongest between measures of interpersonal negotiation strategies and hard and soft drug use, delinquency, and runaway behaviors. Unfortunately, nonproblem youth were not included in their sample!).

The relevance of the social skills literature to the AIDS issue is clear and straightforward. To the degree that skill deficits are linked to particular SED categories, such youth may be less skilled at managing a variety of intimate situations (e.g., finding out about partners' sexual histories, insisting on use of a condom). If a further component of "deficits" is low levels of affective empathy and cognitive role-taking (Kaplan and Arbuthnot 1985), SED who are HIV-positive may not place themselves in the role of "the other" as they make their sexual choices. Gelber (1988, p. 8), in discussing the AIDS situation in Dade County detention facilities, noted how many angry and alienated youth may not be "averse to transmitting the disease to others."

To summarize, it is important to pursue the social skills/problem-solving research because there are possibilities for incorporating very specific role-taking scenarios into AIDS prevention programs.

A final individual level factor, alienation, seems especially likely to be implicated in the AIDS-related behaviors of emotionally disturbed youth. Considerable research in social demography, for example, has drawn upon the alienation framework to clarify relationships between generalized measures of estrangement from the larger society and specific aspects of fertility behavior, including sexual and contraceptive decision-making, premarital pregnancy, and unintentional childbearing (e.g., Groat et al. 1987; Neal et al. 1981; Neal and Groat 1980; Groat and Neal 1975; Groat et al. 1976). Closely related research in social psychology has also clarified conditions of alienation as obstacles to rational decision-making, especially as related to low receptivity to control-relevant cues and readily available information (Seeman 1963; Bickford and Neal 1969).

To illustrate the utility of this theoretical framework, analytically we might ask how adolescents decide whether to engage in sex, to use contraceptives, or to experiment with intravenous drug use. But the mere asking of this question implies some kind of rational decision-making, as assessment of available means and alternative goals as well as the potential consequences. From this perspective, the reasons adolescents behave in certain ways have to do with their perceptions of choices between alternative combinations of costs and rewards. The alienation perspective, by contrast, questions the assumption that adolescent behavior necessarily results from rational decision-making. Rather, individuals are seen as differing in the degree to which they use a rational decision-making style. Decision-making varies in kind and degree, and deliberate planning may be placed along a continuum ranging from very little or none to a great deal. In sum, instead of asking how sexuality decisions are made, we might address the questions of whether they are made and, if so, to what extent they are made and under what conditions they are made.

The attitudes and beliefs about oneself and the relationship between oneself and the larger society of which one is part are organized in different ways by different people. For example, some people seem better able to carry out planned courses of action than others. The cumulative alienation research has specifically addressed this issue and demonstrated that persons high in alienation are less receptive than others to a variety of personally relevant information. Further, poor learning among the highly alienated cuts across a broad spectrum of situational knowledge and is specific to control information, i.e., those high in alienation learn other kinds of information as readily as those low in alienation (Bickford and Neal 1969).

Our own alienation research has emphasized the variables of powerlessness, meaninglessness, normlessness, and social isolation (Groat and Neal 1975). *Powerlessness* refers to subjectively held probabilities that the outcome of events cannot be adequately controlled by oneself or collectively by persons like oneself. In its most intense form, powerlessness implies fatalism and a belief in unregulated occurrences. Low powerlessness, in contrast, reflects a sense of mastery and confidence that the outcomes of events are related to human efforts and intentions. Those with more intense feelings of helplessness, for example, would probably be characterized by lower levels of AIDS information and would be less likely to practice safe sex procedures.

Similarly, *meaninglessness*, the degree to which events are regarded as overwhelmingly complex, chaotic, and unpredictable, may well divert attention from the kinds of information necessary for making events intelligible and coherent. Adolescents scoring high on *normlessness*, the expectancy that socially unapproved behavior is necessary for goal attainment, for example, would tend to have negative attitudes toward society's moral standards, and to believe that social norms carry weak sanctions. Finally, the detachment and anonymity in feelings of *social isolation* may create barriers to forming the social relationships supportive of information transmission and retention so necessary for effective planning. Socially isolated individuals tend to regard other people as unfriendly and disinterested, and their own position as that of being thrown back on their own resources.

Drawing upon these alienation concepts, we would hypothesize that the successful avoidance of AIDS-risk behaviors should be associated with rational decision-making, a sense of mastery and control over the outcome of events, a positive attitude toward social norms, and the perception of social relations as integrative and supportive. Adolescents who expose themselves to risk for HIV infection, on the other hand, would more likely be characterized by feelings of aimlessness and drift, fatalistic resignation, low regard for social norms, and a sense of personal loneliness.

We also would expect, on an a priori basis, considerable overlap and a cumulative effect between emotional disturbance and alienation among adolescents at highest risk for AIDS. Empirically, for example, we found a strong relationship between intense feelings of social isolation and premarital pregnancy (Groat et al. 1976) and, in a recent study of 197 youth in the Toledo area, we found that the agreement with the alienation item, "Most people don't realize the extent to which their lives are controlled by fate or chance" was positively correlated with levels of depression.

Because of the long incubation period of AIDS, it becomes even more unlikely that such young people will be able to rationally link their own present-oriented behavior with a distant low-probability-of-occurrence outcome. Wilson and Herrnstein (1985) make essentially the same point in discussing why people take the risk of committing a criminal act:

> ...consequences gradually lose their ability to control behavior in proportion to how delayed or improbable they are....It can easily be shown that for many people, improbable or distant effects have very little influence on their behavior. For example, millions of cigarette smokers ignore the (possibly) fatal consequences of smoking because they are distant and uncertain. If smoking one cigarette caused certain death tomorrow, we would anticipate a rather sharp reduction in tobacco consumption (p. 49).

Other individual-level factors connect even more directly to the type of emotional disturbance. Certainly, youth with thought disorders, for instance, may be the most vulnerable, i.e., less able to make informed behavioral choices, less capable of attending to and internalizing AIDS prevention messages, less interpersonally sophisticated with potential sexual partners, and most victimized by those who would exploit them. Adolescents who use alcohol/drugs, either as the primary problem or as a mechanism to relieve the bizarre and frightening symptoms of mental illness, may be affected by the behavioral disinhibition associated with chemical abuse. Flavin and Frances (1987, p. 28) cited an informal study from The Association of Bartenders Against AIDS which documented "...unsafe sexual behavior amongst customers who when sober are known advocates of safe sex." Flavin and Frances concluded:

> Activities such as engaging in high-risk sexual activity or sharing contaminated needles, which may be eschewed in a drug free state, may occur in a drug associated state or as a result of depression

> secondary to substance use. It is as though the intoxicated state serves to excuse an individual for engaging in practices which go against available epidemiologic knowledge. This problem may be further complicated by the coexistence of primary or secondary psychiatric disorders, and an increase in self-destructive potential in patients with addictions (1987, p. 24-25).

Sociodemographic Factors

Certain emotionally disturbed youth may be at increased risk for HIV infection and less likely to attend to AIDS prevention messages because of their structural location in society and their degree of attachment to formal and informal social systems, combined with their individual social psychological makeups. These same factors are also likely to vary by such demographic characteristics as race, class, gender, and age. Such variations would differentially affect the risks of various demographic subgroups and complicate the development of any single AIDS prevention program. For example, research has consistently demonstrated a pattern of earlier onset of sexual activity and higher rates of nonmarital intercourse among black in contrast to white adolescents. Chilman (1983) attempted to identify factors associated with these race differences and emphasized many of the same variables outlined above. For example, she cited attitudes such as fatalism, distrust, and alienation as outcomes of these structural forces. Further, she suggested that the prevalence of nonmarital sex and other kinds of deviance (including prostitution), the emphasis among males on sexual conquests, and the lack of permanence in heterosexual relationships can also be traced to conditions of "poverty, poor and crowded housing, and inadequate human services" found in the inner city (p. 95).

Race differences also are important in formulating strategies for reaching drug users at risk. Des Jarlais and Friedman (1987), in assessing ways to reach IV drug users, demonstrated just how complicated this task will be. They suggested that IV drug users currently in treatment, those who wish to enter treatment, those who do not wish treatment, and those at risk for initiation into IV drug use may all need special approaches; and they further noted how ethnicity must also be incorporated into these prevention efforts. In addition to race differences in levels of use (80 percent of the IV drug-related AIDS cases have occurred among blacks and Hispanics), differing attitudes toward safe practices, variation in blacks' access to health care providers, distrust of possible organizers of AIDS prevention seminars, etc., may all play roles (Des Jarlais and Friedman 1987).

In addition, our own research has consistently demonstrated racial differences in such basic features of adolescent life as the role of the peer group, levels of family intimacy, and the degree to which youth believe they are influenced by peer pressure. For example, we found blacks' levels of family intimacy to be significantly higher than those of their white counterparts, while they scored somewhat lower on scales measuring peer intimacy. Further, blacks perceived themselves to be less peer influenced or subject to peer pressure, a finding consistent with the earlier studies of Iscoe et al. (1964). This somewhat different peer-family balance between blacks and whites might be taken into account in attempts to use social networks to foster increased AIDS awareness.

Gender differences are also important in attitudes and socialization during adolescence, and in the patterning of the symptoms of emotional disturbance. For example, one of the cornerstones of AIDS prevention is knowing potential sexual partners' past histories and using condoms. The literature on premarital adolescent sexuality tells us, however, that "...few couples talk about sex before they do it" (Gross and Bellew-Smith 1983, p. 265). Moreover, reasons for this differ by gender. Gross and Bellew-Smith (1983) found that many of the men refrained from "a frank discussion on sex or contraception...because of the belief that it would reduce the males' chances for 'success,' causing her to 'retreat'." Young women, on the other hand, expressed ambivalence about "identifying themselves as sexually active" even though they indeed were:

> When asked about factors leading up to unprotected sex, several of our female respondents answered that they usually did not premeditate or anticipate sexual experiences even though they had engaged in sex in the past. Some individuals seem to perceive each sexual act as an exception; therefore they fail to devise an appropriate contraceptive program. These survey responses reveal a reluctance to acknowledge sexuality as an integral or worthy part of the self (Gross and Bellew-Smith 1983, p. 268).

Young girls have been socialized in two additional ways that are important: (1) to place a high premium on their relations with males, and (2) to be more passive and accepting than their male counterparts.

> An adolescent woman confronted with a sexually assertive and socially desirable male may fear (perhaps accurately) that continuation of an incipient relationship with him is contingent on fulfilling his sexual expectations even before contraception has been secured. For example, one female in our survey told us she worried that the man she was seeing would drop her if she didn't have sex with him. In these circumstances, fear of losing a potential social relationship or being excluded from a social group may predominate over the dangers of "taking a chance." (Gross and Bellew-Smith 1983, p. 267).

If the greater sexual ambivalence of females, their desire for successful relationships, and their (learned) social passivity have consequences for reducing the most elementary discussions about contraception, the idea that they will be especially vigilant with respect to protection against AIDS risk seems even more problematic.

Considerations of gender also play a role in patterns of IV drug use. Like the greater stigma attached to female sexuality, Des Jarlais and Friedman (1987, p. 262) noted that, in some subcultures, "...a woman who injects drugs is more highly stigmatized than a man who injects drugs, including the assumption that a woman who injects drugs is also a prostitute...." Further complicating matters,

> many women who inject drugs are dependent on a male sexual partner as a source of drugs, and they share drug-injection equipment primarily with that man. Since the woman is likely to have less power in the relationship, taking precautions against HIV transmission--both via shared drug equipment and heterosexual activity--may be particularly difficult if the man objects (Des Jarlais and Friedman 1987, pp. 262-263).

Clearly, assertiveness training becomes important for more than success in climbing the corporate ladder.

Finally, recent research on the interactions between gender and emotional disturbance also suggests the importance of tailoring intervention strategies to particular subgroups. For instance, rates of certain categories of disorder may not simply differ by gender, but the attitudes and behavioral correlates of these disorders may vary by sex. To illustrate, in a recent study, Gjerde et al. (1988) found that male depressives scored significantly higher on what the authors termed impulsive nonconformity while this was not the case for females with elevated levels of depression.

A final and critical demographic factor is age. It is vital to remember that adolescents differ developmentally from adults and from each other as they move from early to late adolescence. Elkind (1971) early on outlined the adolescent's tendency

> to regard himself, and particularly his feelings, as something special and unique....This belief in personal uniqueness becomes a conviction that he will not die, that death will happen to others but not him. This complex of beliefs in the uniqueness of his feelings and of his immortality might be called a personal fable, a story which he tells himself and which is not true (p. 45).

Both adolescent egocentrism and this sense of uniqueness generally diminish across adolescence, but as Elkind noted, a primary mechanism for greater realism is the development of peer and other relational intimacy. Thus, to the degree that emotionally disturbed youth suffer social network deficits, they may be slow to modify these aspects of early adolescent cognition. The interplay of these factors, therefore, may intensify what is already a well known optimistic bias in most individuals' assessments of their risks for illness and other undesirable life events (Weinstein 1984).

Conclusions

This chapter proceeds from the basic assumption that research from outside the rapidly proliferating body of AIDS literature can inform us about potential risks for specific subgroups of youth; and further, that in the long run, this research may be more useful than efforts such as surveys designed to measure fear of AIDS or knowledge of AIDS alone.

In understanding the specific challenges of reaching emotionally disturbed youth, more research on the similarities and differences across types of serious emotional disturbance will be particularly helpful. The ways in which structural features, social support characteristics, and social psychological differences link to particular SED categories warrant further research. Highly detailed qualitative research will be particularly useful, as very specific information needs to be incorporated into AIDS prevention programs. For example, knowing that the sharing of "works" (IV drug paraphenalia) serves "both social bonding and economic functions" (Des Jarlais and Friedman 1987, p. 254) is important if this subcultural pattern is to be modified. This kind of ethnographic detail needs to be provided for other specific subgroups (e.g., drug and sex practices of prostitutes). In addition, the ways in which the social worlds of high-risk and nonvulnerable groups intersect also deserve serious investigation.

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CHAPTER 2

BARRIERS TO SUCCESSFUL AIDS PREVENTION PROGRAMS WITH RUNAWAY YOUTH

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Preventing AIDS among adolescents is a national priority (Department of Health and Human Services 1986). This age group engages relatively frequently in behaviors that place them at high risk for the transmission of the human immunodeficiency virus (HIV), i.e., unprotected sexual intercourse and drug use (Kandel and Logan 1984; National Research Council 1987; Rotheram-Borus in press; Yamaguchi and Kandel 1984a, 1984b). Thus far, efforts to reduce the spread of AIDS among adolescents have focused on providing facts about the disease. Several studies have demonstrated that gaps exist in adolescents' knowledge of AIDS (DiClemente et al. 1986; Dohner and Miller 1987; Helgerson and Sabella 1987; Price et al. 1985). Evaluations of the efficacy of AIDS prevention efforts have found that two to three educational sessions with middle-class white and Asian students have been shown to significantly increase adolescents' knowledge base (DiClemente et al. 1988; Dohner and Miller 1987; Sroka et al. 1987).

The educational programs described in the literature have not assessed whether increases in knowledge are accompanied by a reduction in high-risk sexual behavior and drug use. In the sole study examining behaviors related to HIV transmission among adolescents, less than 3 percent of sexually active adolescents aged 16 to 19 years had adopted behaviors potentially effective in reducing the risk of infection (Strunin and Hingson 1987). It is clear from such findings that researchers must develop and evaluate intervention programs that go beyond providing general knowledge of AIDS. Such programs must assess both personalization of AIDS knowledge and accompanying behavior change (Rotheram-Borus et al. 1987).

A number of challenges face researchers attempting to promote safe acts that help prevent AIDS transmission, particularly among minority youth. The goal of this chapter is to highlight psychosocial characteristics of youth that raise potential barriers to the adoption of safe practices. Researchers must consider these features in the design and implementation of AIDS prevention programs.

We expected that the psychosocial barriers to implementing an effective AIDS prevention program with adolescents would be amplified when particular subgroups of adolescents were targeted. One such group, runaway youth, comprises high proportions of adolescents with histories of learning disabilities, emotional crises, life stresses, or psychopathology, and frequent unsafe sex and drug-use practices (Rotheram-Borus and Bradley 1987; Shaffer and Caton 1984). We targeted these runaway youth for participation in an AIDS prevention program and conducted a pilot study to gather baseline data from 31 consecutive intakes at two runaway shelters in New York City. We then conducted a second pilot study with 19 runaways at the same shelters to examine more specifically their thinking and behavior directly related to preventing AIDS.

Based on the findings from earlier work with 576 consecutive studies (Rotheram-Borus and Bradley 1987) and an epidemiological study by Shaffer and Caton (1984), we can anticipate a number of characteristics of runaways that may be potential barriers to successful AIDS prevention programs. The runaways in our sample ranged in age from 12 to 17, with a mean age of about 15.3 years; 47 percent were male; and 26 percent were black, 53 percent Hispanic, and 16 percent white. Approximately 85 percent were sexually active, and 85 percent were using illegal drugs (about 5 percent using intravenous (IV) drugs). These runaways typically experienced problems with the law (7 percent boys, 4 percent girls), pregnancy (34 percent), dropping out or being expelled from school (71 percent boys, 44 percent girls), and having been physically abused or neglected at home (37 percent). The majority of the adolescents (63 percent) at the shelters were actually throwaways (homeless by mutual agreement of parents and teens or because of household breakup). The last stable residence was with one or both parents for only 37 percent of these runaways; 26 percent had lived with another family member or friend; a group home, foster home, or other institution had been the home for another 37 percent.

We adopted a cognitive behavioral model in designing an AIDS prevention program based on the results of earlier prevention efforts targeting teenage pregnancy, smoking, and drug abuse and providing social competency training. This theoretical perspective led us to hypothesize that four interactive and prerequisite components are necessary in an AIDS prevention program: general knowledge of AIDS, personalized knowledge, coping skills, and support resources. Therefore, we assessed each of these components in our pilot samples, as well as baseline rates of unprotected sexual activity and high-risk drug use behaviors. While conducting these evaluations, the potential barriers to successful programs became apparent. Before detailing these barriers, let us describe the components assessed in the pilot samples.

1. General knowledge of AIDS. By this we meant definitions, means of transmission, high-risk behaviors, prevention strategies, HIV testing, incubation of HIV, and the meaning of test results. This was assessed in a 30-item questionnaire designed by DiClemente and colleagues (1986).

2. Personalized knowledge of AIDS. We defined this as (a) perceived threat of AIDS (a belief that "I can get AIDS"), assessed on a 4-item scale (Martin 1986); (b) personal efficacy (a belief that "I can change my behavior"); and (c) response efficacy (a belief that "AIDS can be prevented"). These were evaluated by a 20-item, modified Health Locus of Control Questionnaire (Wallston et al. 1976).

3. Coping skills. These included cognitive, affective, and behavioral skills. The behaviors needed are the ability to say "No", to make requests assertively, to negotiate effectively, and to stand firm and feel positive about one's competence in the face of criticism from others. Seven focus groups, some comprising same-sex and some mixed-sex groups and led by research staff, included behavioral assessments of coping skills. For example, youths were asked to role-play screening prospective sexual

partners and negotiating condom use.

4. Access to resources. This included continued access to condoms and to ongoing, comprehensive mental health and health care services. Access to resources was assessed in an 18-item interview covering knowledge and use of resources of the following kinds: free condoms, condoms for purchase, health care, prenatal care, food and housing, education and training, legal aids, and HIV testing.

In addition to assessing these four components of the AIDS prevention program, we established baselines for the high-risk behaviors that would constitute the primary targets of the program. High-risk sex and drug use behaviors were assessed in three formats. First, interviews with same-sex clinicians were conducted using the Sexual Behavior Assessment Schedule Behavior-HIV-Adolescent (SEBAS-HIV-Adol; Meyer-Bahlburg and Ehrhardt 1987). The interview covered both heterosexual and homosexual experiences and included items about rape and incest. Youths were also asked about their past substance abuse and their use of non-IV drugs during sexual relations (Rotheram-Borus et al. 1987). Second, the focus groups cited above revealed attitudes and practices related to sex and drug use. Third, individual interviews were conducted to gather qualitative information on the three most recent sexual encounters.

During these assessments, four psychological barriers to effectively reducing unprotected sexual intercourse emerged--youths' unrealistic self-perceptions, atypical experience of psychosexual milestones, sexual abuse, and psychological distress.

Youths' Unrealistic Self-Perceptions

The results of the pilot studies revealed that youths seemed to hold unrealistic self-perceptions. They had a moderately high level of general knowledge of AIDS (correct answers on questionnaire definitions, 68 percent; prevention strategies, 74 percent; high-risk groups, 82 percent; means of transmission, 84 percent; and outcome of AIDS, 84 percent). However, they had little personal fear of AIDS (mean score = 2.4 on a 10-point scale with 10 indicating great fear). They reported moderate response efficacy (mean = 3.3 on a 20-item, 6-point scale with 6 indicating high efficacy), with some youth believing that AIDS is preventable. Many youth were confident about their ability to personally implement safe behaviors (mean = 4.1 on a 12-item, 6-point scale with 6 indicating high personal efficacy). They perceived few negative consequences from implementing safe acts, e.g., using a condom (mean = 1.2 on a 6-point scale with 6 indicating high negative concern).

While potentially encouraging, these reports proved to be in direct contrast to the researchers' observations in focus groups. When youths were asked to role-play high-risk situations for unsafe acts (e.g., negotiating the use of a condom with a partner), the results were at odds with the self-report questionnaires. In focus groups, youths who had reported adequate personal efficacy (almost the entire sample) then recognized their inability to implement these behaviors, even in a simulated task. Most stared open-mouthed when asked to role-play a conversation in which they asked about their partners' sexual history. They had no idea how to ask a partner to use a condom. Their ideas about how to put on and remove condoms were inconsistent with the high self-reports of competency. In fact, many adolescents who had said they would use condoms were afraid to touch them when they were handed out in a group activity.

Finally, the youths' descriptions of their interpersonal relationships were not consistent with reported behavior. For example, youths would describe dating for 3 months, getting to know each other well, falling in love with each other, and supporting each other to be safe. This clearly did not coincide with the reports of sexual activity on the semistructured interviews. In these interviews, runaways reported an average of 3.8 partners over the prior 3 months. Furthermore, only 40 percent had ever used a condom (and no one had always used a condom in sexual intercourse).

Given these reports, youth are clearly inconsistent and unrealistic in their reports of personal efficacy and sexual encounters. This creates methodological and research design problems. First, researchers must develop multimethod assessments of the perception of threat and personal efficacy for safe acts. We have piloted several potential strategies for dealing with this problem (Rotheram-Borus et al. 1987). For example, we hope to develop brief videotaped scenes that portray high-risk situations. Adolescents will be asked to evaluate the degree of risk in the situation, report their behavioral response, and rate their comfort and/or efficacy in response to this staged scene.

We have also asked adolescents to build individualized hierarchies of high-risk sex and drug situations, similar to those developed in the early 1950s for the treatment of phobias (Wolpe 1958). In this way, high-risk situations for a particular youth can be identified, opening the way to individually tailored prevention efforts. When such assessment strategies are employed in conjunction with questionnaires, interviews, and group discussions, more reliable and valid conclusions are likely to emerge.

A second implication of these pilot findings is that personalized knowledge of AIDS must be directly targeted by intervention programs. Adolescents may need general education as a prerequisite to personalizing their knowledge of AIDS. However, a second link must be developed. Youth must still link this personalized knowledge to behavior.

To meet the goals described here requires a considerably more intensive program than the 2- to 3-hour educational programs currently being implemented. Therefore, we designed an intervention program that would provide the maximum that could realistically be implemented in a community setting--15 hours of video workshops, same- and mixed-sex groups, individual interviews, and liaisons to ongoing comprehensive health care. This maximum is also the minimum necessary to change unrealistic perceptions enough to affect behavior.

Atypical Experience of Psychosexual Milestones

For those youth not yet sexually active, as researchers have learned from work related to preventing cigarette, alcohol, and drug use among youth, it is easier to stop youth from starting behaviors than it is to stop these behaviors once they have begun (Botvin et al. 1980; Botvin et al. 1984; Yamaguchi and Kandel 1984a). Thus one goal of an AIDS prevention program is to delay the onset of sexual intercourse.

Obviously, the aim is not to eliminate sexuality, but rather to help youth identify activities that may substitute for unprotected sexual intercourse. Some prevention programs label this eroticizing safer sex (Palacios-Jimenez and Shernoff 1986). These programs help youth perceive kissing, hand holding, touching, and masturbating as pleasurable activities that need not lead to intercourse, thus helping them postpone becoming sexually active.

An alternative approach for reducing risky sexual behavior among youth who are already sexually active arises from considering their sequencing of sexual milestones. However, we have found that youth experience different sequences, thus complicating the issue.

Data for young white females (Udry and Billy 1985) shows a sequence of psychosexual milestones, such as dating, kissing, holding hands, breast petting, genital petting, and sexual intercourse. But this does not seem to accurately describe the sexual development for black youth in general (Belcastro 1985; Hayes 1987). Consistent with this, we found that 41 percent of the youths we interviewed had proceeded through these milestones in a different sequence. In particular, many of these youth who had had sexual intercourse had never engaged in genital petting (60 percent of the girls and 33 percent of the boys). Girls in our pilot sample who had engaged in genital petting began to experience this an average of 1.6 years after their first sexual intercourse.

Therefore, we must design programs that anticipate different developmental sequences and plan to address this phenomenon. One of the potential goals for AIDS prevention programs may be to encourage youth to perceive kissing, touching, and fondling as end points and perhaps as substitutes for unprotected sexual intercourse.

However, the consideration of such a goal immediately raises a separate ethical issue: What impact will the value placed on different sexual activities have on youth's ethnic identity? How much do these milestones reflect important cultural differences? There are clearly ethnic differences in which behaviors are defined as sensual, sexual, and pleasurable (Belcastro 1985; Bell and Weinberg 1978). In some cultures, masturbation and oral sex are valued positively, but in other cultures these activities are denigrated (Asayama 1975; Gregersen 1986; Klausner 1964; Mead 1928; Money and Musaph 1977).

While it is not yet clear whether oral sex is safer sex, the available evidence suggests that there are ethnic differences in engaging in oral sex. In our program, we work with predominantly Puerto Rican and black youth, and how such issues should be addressed is unresolved. For example, in our first year only 18 percent of the girls reported engaging in oral sex. This sharply contrasts with research with white adolescents (Newcomer and

Udry 1985), in which 42 percent of the girls reported having engaged in oral sex. For adolescents who are not white, would engaging in oral sex interfere with their sense of ethnic identity? It is unclear whether it is appropriate to encourage adoption of other sexual behaviors that might place one at less risk for HIV infection than unprotected sexual intercourse, nor are the implications clear for issues of ethnic identity among these youth.

Sexual Abuse

Estimates of the prevalence of sexual abuse for runaways fall in the range of 24 percent to 36 percent (Shaffer and Caton 1984; Rotheram-Borus and Bradley 1987). Abuse was reported as the precipitant for leaving home for 25 percent of the youth in our pilot studies. These figures are no higher than those reported in the general population (Kinsey et al. 1953; Peters et al. 1986; Russell 1983). However, there is no consensus about the exact prevalence of sexual abuse of children. "Reported rates range from 6 percent to 62 percent for females and from 3 percent to 31 percent for males" (Peters et al. 1986, p. 16). The estimates obtained depend upon the population sampled, terms used in defining sexual abuse, the mode of eliciting the information, and the number and specificity of questions asked (Peters et al. 1986). It is clear from these prevalence rates that sexual abuse is not uncommon even in the general population and runaways have often had such experiences just prior to leaving their homes.

There is substantial evidence that such abuse affects sexual behavior, both within 2 years after the abuse and for decades later. The long-term effects include impaired self-esteem, depression, suicide attempts, sleeping disturbances, eating disorders, dissociation, and interpersonal problems (Becker et al. 1984; Browne and Finkelhor 1986). Between one-fifth and two-fifths of sexually abused children exhibit some obvious disturbance (Browne and Finkelhor 1986).

Sixty percent of the runaway girls in our pilot studies reported sexual abuse. Although these results may be an overestimate, the connection between running away and sexual abuse is consistent with other research (Becker and Shah 1986; Browne and Finkelhor 1986) showing that higher proportions of runaways have been sexually abused.

The literature also reports an effect of sexual abuse on later sexuality. Problems in the area of sexuality are very common among females who have been sexually abused as children, just as they seem to be very common among adult women who have been raped (Becker et al. 1986). Sexual abuse has been associated in females with greater dissatisfaction with later sexual relationships, more sexual guilt, an inability to relax and enjoy sex, and less orgasm. In addition, it relates to either an avoidance or abstention from sex, or conversely, a compulsive desire for sex (Browne and Finkelhor 1986). These behaviors are clearly important variables mediating risk. A compulsive desire for sex could lead to large numbers of sexual partners.

That sexually abused females engage in more unprotected sexual activity is supported by earlier research and by our pilot results. One potentially interesting finding in our pilot data suggests that abused girls date and have sexual activity with significantly more partners than do the nonabused girls, while delaying an experience they would define as love. These results are summarized in Table 1. Our evaluations exclude the abusing experience from calculation of the age at first experience and number of partners.

Table 1. Sexual behavior of abused and not abused females
(n=19)

	Not abused	Abused
Mean age of first sexual intercourse *	13.1	14.0
Mean age of first falling in love	15.8	12.8
Mean number of sexual partners in the last 3 months *	3.8	1.8
Mean number of dating partners *	6.6	1.5

* Excludes the abusing experience.

Clinical researchers are confronted with several issues that must be addressed when they attempt to evaluate sexual abuse among adolescents. First, researchers must collaborate and/or consult with experts in sexual abuse. Second, disclosing sexual abuse is a highly intimate activity, which must be conducted in individual interviews. The wording for eliciting such disclosures is tricky. Asking about uninvited or unwanted or upsetting sexual experiences may be more likely to elicit accurate reports than asking about forced sex.

Third, it is imperative to provide for referral for clinical intervention when the experience of sexual abuse is elicited from adolescents. Issues of sexual abuse require the expertise of a counselor who has relevant training and experience. The thoughts and emotions evoked when a youth attempts to describe sexual abuse are painful and should not be elicited unless follow-up is planned to help the youth work through them.

Fourth, discussions of sexuality need to acknowledge the prevalence of upsetting sexual experiences. For example, our prevention activities attempt to encourage negotiation between two persons, as well as to encourage discussion of safe practices, such as requests to use condoms. For youth who have been sexually abused, it may be important to acknowledge the impact of this abuse before these other behaviors can be effectively taught. Thus, it may be important to say: "Many of you in this group may have experienced uninvited sexual acts and have strong feelings about how this may affect your relationships with other persons."

Given the base rates of sexual abuse in the general population, the issue of abused youth must also be considered in designing programs for adolescents in school and community settings.

Psychological Distress and High-Risk Behaviors

In a 1984 epidemiological study in New York City, Shaffer and Caton found that runaway youth experience considerable emotional distress. Table 2 presents some of their results.

Table 2. Psychiatric status of runaway youths in New York City shelters

(in percentages)

	Females (n=59)	Males (n=59)
Depressed only	15	44
Antisocial only	27	18
Depressed and antisocial	45	37
Neither	12	11
Past suicide attempt	33	31

Source: Shaffer and Caton 1984

Substantial percentages of youth in their study were antisocial, depressed, or both, or had attempted suicide. Rotheram-Borus and Bradley (1987) also found rates similar to these in a study of 924 runaways over a 2-year period.

Psychological distress is also manifested among runaways in the high prevalence of conduct problems. In the Shaffer and Caton study, 37 percent of the boys and 19 percent of the girls had been charged with a crime, most often assault or robbery. Expulsion or suspension from school--usually for fighting or drug use--was very common for these youth. Three-quarters of the boys and half of the girls had been expelled or suspended (Shaffer and Caton 1984).

Adolescents in general are susceptible to high levels of depression, anxiety, and other unpleasant mood states. Adolescent girls aged 14 to 18 are particularly likely to be depressed (Kandel and Davies 1982).

The connection between psychological distress and risky behavior is demonstrated by research showing a relationship between depression and use of illicit drugs (Kandel and Davies 1982). Other research suggests a connection between depression and developing AIDS (Diley et al. 1985; Perry and Jessor 1985). Thus, for some adolescents, being depressed may make them more likely to engage in unprotected sexual intercourse or other behavior that increases the likelihood of their being exposed to HIV. Problems with low self-esteem have been linked to less use of contraception to prevent pregnancy (Hayes 1987), and so might also be expected to affect the use of condoms to prevent AIDS.

Runaway youth reflect the problem behavior syndrome defined by Jessor and Jessor (1977), that is, having multiple behavior problems occurring in tandem, such as alcohol and drug abuse, conduct problems, and problems with their sexual behavior. Not only does problematic behavior cluster together, but it seems to cluster with unpleasant mood states. Ensminger (1986) reported a .60 correlation among sexual behavior, drug use, suicide attempts, and depression. Therefore, runaway youth would be likely to engage in risky behaviors related to AIDS as part of a general pattern of emotional distress and risk-taking.

The literature on mood states and drug use during adolescence often argues that depressed youth are using street drugs to try to alleviate their distress (Deykin et al. 1987). Sexual behavior may be another tactic for providing temporary relief from distress. And a depressed youth is less likely to practice safe sex.

The importance of emotional states in predicting risk behaviors requires AIDS prevention programs to focus heavily on helping youth recognize, label, and assess the intensity of their feelings, and control their emotional reactions. One of the greatest needs for a youth experiencing dysfunctional levels of distress may be to identify a personalized risk hierarchy--a set of situations that are likely to trigger various levels of emotional distress associated with engaging in unsafe behavior. For some youth, being ridiculed by a peer can lead to a high level of distress. For others, getting a bad grade at school might be so distressing it could lead to unsafe behavior. As mentioned earlier, the literature on behavior therapy for the treatment of phobias and desensitization (Wolpe 1958) is relevant for the development of a personalized hierarchy of risks for unsafe behaviors, which may help youth articulate and concretely deal with unpleasant emotions. For example, our program includes an activity called the Feeling Thermometer, in which youth develop their own risk hierarchies, describing situations that generate varying degrees of difficult emotions and planning coping strategies to deal with them.

A second implication of this relationship between psychological distress and risky behavior among runaway youth is the need for an intervention that includes a comprehensive service nêtwork, one that meets their other pressing needs as well as those directly related to their high-risk sexual and drug use behavior. For example, their environment may undermine their sense of self-esteem and security. Therefore, to reduce risky behavior, the environment would need to be consciously restructured as a holistic system for meeting runaway youths' needs, including providing support for managing difficult external events (eviction from home, unplanned pregnancy, legal problems). This would entail providing and coordinating youths' access to various kinds of services including housing, financial aid, medical care, psychotherapy, legal aid, social services, and education.

Conclusions

In summary, AIDS prevention programs with multiproblem youth, such as the runaway populations with whom we work, must be more extensive than the educational programs initially evaluated and tested among adolescent groups. Even within the context of a more intensive program, we know very little about:

1. The design of programs with goals beyond enhancing general knowledge of AIDS that use multiple assessment tools to ensure these goals are appropriately evaluated;

2. The appropriateness and feasibility of eroticing safe sex and the potential impact of encouraging alternatives to unprotected sexual intercourse;

3. The manner in which sexually abused youth may be different from those of the nonabused, even within a high-risk population, and the different interventions that are therefore needed; and

4. The interconnectedness of unpleasant mood states and conduct problems and sexual behavior.

Current programs need much more information about these issues.

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CHAPTER 3

ISSUES IN AIDS PREVENTION AMONG JUVENILE OFFENDERS

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Introduction

To date, cases of acquired immunodeficiency syndrome (AIDS) have been reported in most of the countries in the world, and the World Health Organization has estimated that 5 to 10 million individuals are infected with the human immunodeficiency virus (HIV), the causative agent.of AIDS (Liskin et al. 1986; WHO 1984). In the United States, early cases of AIDS were primarily confined to adults who were male homosexuals or users of intravenous (IV) drugs. The few AIDS cases among young people were usually among hemophiliacs or other recipients of infected blood products. However, HIV infection through sexual contact now constitutes an increasing percentage of reported cases in adolescents and young adults. This is certainly true for juvenile delinquents, who tend to become sexually active at young ages, often with multiple and high-risk partners. The risk of AIDS among juvenile delinquents is further elevated by their increased potential for direct blood contact, due to IV substance use and injuries resulting from aggressive behaviors.

Preventive efforts among youth, both delinquent and nondelinquent, can be difficult, because many young people are imbedded in social contexts where the HIV-risking behaviors to be prevented may be culturally (and subculturally) normative, highly reinforcing, and not easily modified. Denial of membership in any risk group and "adolescent invulnerability beliefs" also present significant barriers to the adoption of preventive behaviors among this population. Ironically, this denial of risk is due in part to the extended latency period following HIV infection that creates an absence of adolescent peer models who are sick with AIDS or AIDS-related complex (ARC).

By virtue of their developmental stage, when physical size, strength, and skills are rapidly increasing, adolescents often perceive themselves as very healthy, even though such health beliefs may not always be accurate. In fact, adolescents, particularly those from lower socioeconomic strata, represent a medically underserved segment of the U.S. population, with increasing mortality in recent decades (Shafer 1988). This increased mortality is a function of many factors, including normative increases in experimentation with health-risking behaviors. Many youth in the United States also lack parental involvement, and more important, parental resources for maintaining either preventive or routine medical care. In fact, the greatest disparity in health status among socioeconomic classes may occur in the adolescent age group, and poor delinquents are at particularly high risk for unmet health care needs (Rolf et al. 1988a).

The purpose of this chapter is to present some new data on health beliefs and AIDS knowledge among delinquents. The health data come from a Department of Health and Human Services/Office of Maternal and Child Health-funded health survey (Thompson 1986) conducted in a mid-Atlantic city juvenile delinquent detention center. The AIDS knowledge and risk surveys conducted in the same detention center were components of an AIDS-preventive intervention research pilot project for youth at risk for HIV infection. The linkage of these two research projects provided us with the demographic, legal, and health characteristics of these incarcerated delinquents, and more important, with the incidence of health problems and certain health-risking behaviors relevant to HIV infection.

The medical history data were obtained primarily through a screening examination and interview conducted by a study-supported nurse. Only rarely were the nurse's intake reports supplemented by physician examinations.

Self-perceptions of health among these incarcerated male delinquents, aged 14 to 18, as with most adolescents, were very positive, and few had negative perceptions. Only 1 percent reported their health as "poor," and only 4.7 percent reported they were sick "more often" than others their age. Nonetheless, the youths' 12-month self-reported health histories had frequent accounts of health problems. Several psychosomatic or emotional problems were frequently reported: 16.7 percent had repeated headaches, 16.9 percent had trouble sleeping, 13.3 percent had thoughts of suicide, and 8.5 percent attempted suicide.

Several findings from the delinquents' lifetime health histories have implications for their risks for HIV infection. Thirty-two percent reported injuries during the past year, and 21 percent reported needing medical care for one or more injuries. Unfortunately, there was no direct inquiry about fight-related injuries during which spilled blood could represent potential exposure to HIV.

Another risk indicator was the finding that 11.4 percent reported having had a sexually transmitted disease (STD). The actual rates of STDs are probably underreported by these male youths for two reasons. First, chlamydia infections, which are highly prevalent in the area, are often asymptomatic in both males and females. Second, general clinic samples of female adolescents, who are even more likely to have asymptomatic infections than males, have shown STD rates of 25 to 30 percent in this city. Further, in a study of HIV seroprevalence among patients attending STD clinics in this city (Quinn et al. 1988), the seropositivity rates by age and sex showed that 2.3 percent of youths of both sexes (aged 15-19) were HIV seropositive. More distressing was the finding that 28 percent of seropositive females were age 19 or younger. These findings are similar to seropositivity rates observed in Africa, where the virus is believed to be transmitted primarily through heterosexual contacts.

Subjects in the Survey

Our studies with incarcerated delinquents focused on males because of both the segregation of the sexes into different detention centers and the differences in incidence of health- and HIV-risking behaviors between males and females. Therefore, only data for male incarcerated delinquents are reported.

The first survey was completed by 301 subjects, and the second by 224 subjects. The average age of the inmates was approximately 16 years (with a range of 12 to 19). Slightly more than three-quarters (78.6 percent) of the incarcerated males were nonwhite, and there was no difference in the age distribution between whites and nonwhites (F=.39, p=0.53). The majority of these committed juvenile males came from single parent or non-nuclear families. Slightly more than a third of the inmates had committed one or more property offenses, and 22 percent had committed a violent crime. Forty percent were serving sentences for two or more crimes, and 85 percent had prior offense histories. Also relevant to HIV risks, 16 percent were committed for substance abuse offenses, and 4 percent for sex offenses. Certainly, these youths included persons who were among the more serious types of juvenile offenders.

Their average grade level in school was the beginning of the ninth grade. Further, these committed juveniles were often at grade levels below their chronologic age, and their reading levels were approximately 2 years behind their grade level. The low reading levels should be borne in mind when using complex written surveys in needs assessment and when implementing preventive measures that depend extensively on written materials.

AIDS Surveys Two surveys were administered to all incarcerated delinquents aged 14 or older in the correctional facility. The first survey, conducted in February 1988, assessed AIDS-related knowledge and attitudes using a 2-page, 37-item, largely true/false questionnaire. A second survey, conducted in April, involved a more extensive survey of cognitive and behavioral variables including AIDS-related knowledge, HIV-risking behaviors, perceptions of personal risk, and assessment of potential for behavior changes relevant to prevention.

This second survey instrument was an eight-page questionnaire with items drawn from several published high school student surveys (e.g., DiClemente et al. 1986, 1988) and from a more extensive questionnaire developed for use with samples of college freshmen (Rolf et al. 1988b). Both surveys were administered by teachers in the detention center classrooms, with the approval of the school administration and the informed consent of the youths.

Results

The data presented here focuses on AIDS knowledge; attitudinal and behavioral data are presented elsewhere (Rolf et al. 1988c). The AIDS knowledge items in both surveys were intended to assess how much the delinquents knew about the cause, transmission, treatment of, and behavioral risks for AIDS. We started with three hypotheses: 1. Such knowledge among deliquents would be relatively good if somewhat less than the generally high levels of knowledge previously reported for nondelinquent samples of youth (e.g., Baldwin and Baldwin 1988; DiClemente et al. 1986, 1988; Rolf et al. 1988b); 2. Actual risk for exposure to HIV would be inversely proportional to the level of AIDS knowledge; and 3. If an individual was at high personal risk for HIV infection and showed high levels of AIDS knowledge, then the individual had deficiencies in causal reasoning or in other factors important in adopting preventive behaviors, such as self-efficacy and locus of control.

The results of the first survey's 29 true/false knowledge questions are presented in Table 1. Of the 301 youths who responded completely, 41 percent scored 80 percent correct or higher. Most knew the basic facts about modes of transmission, that not all gay men and women have AIDS, and that anyone can potentially get AIDS. Some of the frequently missed items were those most relevant to self-protection behaviors or motivations. For example, 26 percent thought there was no way to avoid exposure to AIDS, and 20 percent were not sure. Only 64 percent knew that a condom would not provide complete protection against infection with the AIDS virus.

The second survey included a much briefer, seven-item assessment of basic AIDS knowledge (Table 2). The youths were asked to indicate if each of the specified activities represented a high or low risk for HIV infection. Of the 198 youths who completed all seven items, 32.8 percent answered all correctly, and 40.4 percent missed only one item. Quite often, the missed item was the inquiry about HIV risk associated with saliva or tears. In light of the media controversy surrounding this mode of HIV transmission, knowledge scores were also determined excluding the saliva item; 64.5 percent of the respondents answered all of the remaining risk knowledge scores, both with and without inclusion of the saliva item (7 items: $r=0.142$, $p=0.023$; 6 items: $r=0.179$, $p=0.006$). There was a

Table 1. Survey 1 - Knowledge about AIDS among incarcerated delinquents

(n=301)

		True % (n)	False % (n)	Don't Know % (n)
1.	AIDS is a medical condition in which your body cannot fight off disease. (T)	94.4 (284)	2.6 (8)	3.0 (9)
2.	AIDS is caused by a virus. (T)	78.7 (237)	15.0 (45)	6.3 (19)
3.	AIDS is a condition you are born with. (F)	7.0 (21)	87.0 (262)	6.0 (17)
4.	Stress causes AIDS. (F)	4.3 (13)	87.7 (264)	8.0 (24)
5.	If you kiss someone you will get AIDS. (F)	16.6 (50)	77.4 (233)	6.0 (17)
6.	If you touch someone with AIDS, you can get AIDS. (F)	8.3 (25)	86.0 (259)	5.7 (17)
7.	All gay men have AIDS. (F)	7.6 (23)	80.4 (242)	12.0 (36)
8.	What you eat can give you AIDS. (F)	10.3 (31)	80.1 (241)	9.6 (29)
9.	Anybody can get AIDS. (T)	93.4 (281)	2.7 (8)	3.9 (12)
10.	Women have more chances of getting AIDS during their period. (F)	32.9 (99)	38.5 (116)	28.6 (86)
11	AIDS is not at all serious; it is like getting a cold. (F)	3.7 (11)	89.0 (268)	7.3 (22)
12.	AIDS can be spread by using someone's belongings like a comb or hairbrush. (F)	8.6 (26)	83.7 (252)	7.7 (23)

		True % (n)	False % (n)	Don't Know % (n)
13.	AIDS is caused by the same virus that causes venereal disease. (F)	36.9 (111)	34.2 (103)	28.9 (87)
14.	The cause of AIDS is unknown. (F)	36.2 (109)	49.8 (150)	14.0 (42)
15.	Just being around someone with AIDS can give you the disease. (F)	8.0 (24)	84.7 (255)	7.3 (22)
16.	Having sex with someone who has AIDS is one way of getting AIDS. (T)	94.4 (284)	3.6 (11)	2.0 (6)
17.	If a pregnant woman has AIDS, there is a chance it may harm her unborn baby. (T)	92.4 (278)	1.3 (3)	6.3 (19)
18.	All gay women have AIDS. (F)	6.6 (20)	77.4 (233)	16.0 (48)
19.	Using a condom during sex does not fully protect one from getting AIDS. (T)	64.1 (193)	18.9 (57)	17.0 (51)
20.	Most people who have AIDS usually die from the disease. (T)	90.7 (273)	3.0 (9)	6.3 (19)
21.	There is no cure for AIDS. (T)	80.1 (241)	8.3 (25)	11.6 (35)
22.	You can get AIDS by shaking hands with someone who has it. (F)	6.6 (20)	87.0 (262)	6.4 (19)
23.	AIDS is a life-threatening disease. (T)	86.0 (264)	4.7 (14)	9.3 (28)
24.	Receiving a blood transfusion with infected blood can give a person AIDS. (T)	87.7 (264)	3.3 (10)	9.0 (27)

		True % (n)	False % (n)	Don't Know % (n)
25.	People with AIDS usually have a lot of other diseases as a result of AIDS. (T)	46.5 (140)	25.9 (78)	27.6 (83)
26.	You can get AIDS by sharing a needle with a drug user who has the disease. (T)	93.0 (280)	2.7 (8)	4.3 (13)
27.	AIDS can be cured if treated early. (F)	14.0 (42)	63.5 (191)	22.5 (68)
28.	There is a vaccine to prevent one from getting AIDS. (F)	20.0 (60)	50.8 (153)	29.2 (88)
29.	There is no way to avoid exposure to AIDS. (F)	26.0 (78)	53.8 (162)	20.2 (61)

Note: Letters in parentheses are correct responses.

Table 2. Survey 2 - AIDS Knowledge Items

What are the chances of getting infected with the AIDS virus if a person does the following things?

	The chances are: (in percentages)		
	Low		High
Has unprotected sex (not using a condom) with an infected person.	15.6	(n=205)	84.4
Uses an infected person's belongings, like a comb or a hairbrush.	83.0	(n=206)	17.0
Receives a blood transfusion with infected blood.	9.3	(n=205)	90.7
Shares needles, syringes, or works to inject drugs.	10.7	(n=205)	89.3
Shakes hands or hugs someone who is infected.	89.7	(n=204)	10.3
Comes into contact with the saliva (spit) or tears of an infected person.	51.2	(n=203)	48.8
Has many different sex partners.	12.9	(n=202)	87.1

slightly significant difference in knowledge by race; the average score on the seven knowledge items was 6.09 for white males and 5.86 for nonwhite males (F=3.31, p=0.07).

The survey results confirmed that the majority of our sample of incarcerated delinquents knew the salient facts about and risks for AIDS. However, it was also clear that this knowledge would not be enough to motivate them to discontinue their HIV-risking behaviors. Survey 2 found that 73 percent reported having sexual intercourse during the past 3 months, and 35. 6 percent reported having three or more partners. We have reported in detail elsewhere (Rolf 1988; Rolf et al. 1988c) that no significant association (x2=1.549, 2 d.f.) was found between three levels of AIDS knowledge and having taken part in none versus one or more HIV-risking sexual behaviors. There was a suggestion that those who had engaged in one or more of these risky behaviors seemed to have poorer knowledge about AIDS than those who reported no such risky behaviors. The percentages reporting participation in these HIV-risking sexual behaviors are shown in Table 3.

Table 3. Survey 2 - Positive responses to questions about HIV-risking behaviors

As far as you know, have you ever had sex with someone who may have:

	Yes (percentage)
Had VD (other than AIDS)	7.1 (198)
Been exposed to someone with AIDS	3.1 (196)
Had AIDS or the AIDS virus	1.0 (196)
Been a prostitute	8.2 (196)
Been a hemophiliac	1.0 (195)
Been a bisexual or homosexual	1.0 (194)
Been an IV drug user	14.4 (195)
Have you ever shared needles or works with someone else to get high?	5.4 (184)

Discussion

Compared to typical adolescents, incarcerated delinquents are at much higher risk for AIDS. Our survey results indicated that delinquents have generally good knowledge about AIDS and behavioral risks for HIV infection, but remain at relatively high behavioral risk for HIV infection. For example, two-thirds of Survey 1's respondents knew that condoms can reduce risks for infection with the AIDS virus. However, in Survey 2, 36.8 percent reported never using a condom, and only 15 percent reported condom use at their last intercourse.

In our second survey, the respondents reported having their first sexual intercourse at an early age (median age was 11 years); 96 percent were currently sexually active, they had engaged in risky sex practices (e.g., only 2 percent reported homosexual sex, but 19.3 percent reported male/female anal sex), and they had had contacts with high-risk sexual partners (e.g., 14.4 percent had had sex with an IV drug user). Other data from Survey 2, which we have reported elsewhere (Rolf et al. 1988c), indicated that most of these youth have not adopted nor plan to adopt protective behaviors in spite of their awareness of them. Indeed, the more risk-taking juveniles tend to perceive that they are very unlikely to get AIDS or even a more common STD.

Preventing risk for perinatal AIDS may become an increasingly high priority for those working with delinquents. In Survey 2, 26 percent reported having already fathered a child, and 31.4 percent reported using no form of contraception with their current partners, most of whom were also teenagers. This is disturbing since in New York City, as in many urban centers, 10 percent of the infants with AIDS were born to mothers under 21. Congruent with the long latency between HIV infection and onset of symptoms (CDC 1988), many of these young mothers, and perhaps their HIV-infected partners, had shown no AIDS or ARC symptoms at the time of delivery.

Our findings call for more directed efforts at determining how AIDS-risking beliefs and behaviors are fostered, and how they can be altered by preventive interventions. Much more information is needed to plan AIDS-preventive interventions for high-risk youth. In particular, we must learn how both risk and protective factors can be studied as independent and dependent variables in the biological, psychological, and social processes by which individuals develop and behave adaptively and maladaptively.

As part of this process of discovery, our research group is analyzing data on the prevalence of denial and invulnerability beliefs and the function(s) that these beliefs may play in the failure to adopt preventive behaviors. This denial is all too commonly expressed in the form of a belief that "few of my friends are worried, or none of them have it because, like me, they're not gay. Therefore, I don't need to protect myself." One hears this repeatedly from normal adolescents being told to beware of AIDS. For these typically very healthy, high-energy youths, death and illness are virtually unthinkable. For delinquent youth who frequently engage in behaviors involving high risks for health and liberty, admitting to fear of AIDS or reporting that they have altered or will alter their behavior to reduce AIDS risks would be very unlikely and incongruent with their "macho" images.

Clearly, more preventive intervention research is needed with delinquent and other subgroups of adolescents at high risk for HIV infection. Our research group is engaged in two such studies. One project funded by NIMH involves monitoring seroprevalence and conducting preventive interventions among street youth in a Brazilian and a U.S. city. A second multicenter project recently funded by the Centers for Disease Control involves trying to prevent increasing rates of perinatal AIDS. In Baltimore, our research group's "hometown," high rates of teen pregnancy and delinquency will challenge our preventive intervention programs.

In conclusion, we are dedicated to our pursuit of these prevention research activities with high-risk adolescents, but at the same time, we find it difficult to be optimistic about our ability to discover effective means to slow the spread of HIV among the kinds of juvenile delinquents we have surveyed. We fear that their big trouble with the law will be overshadowed by their big trouble with AIDS.

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CHAPTER 4

PREVALENCE OF HIV-RELATED HIGH-RISK SEXUAL AND DRUG-RELATED BEHAVIORS AMONG PSYCHIATRICALLY HOSPITALIZED ADOLESCENTS

PRELIMINARY RESULTS

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Adolescents and AIDS

Adolescents have recently been identified as being at increased risk for human immunodeficiency virus (HIV) acquisition and transmission (Institute of Medicine 1986; DHHS 1986). The limited data available suggest that adolescents are not sufficiently informed about the cause, transmission, and especially the prevention of HIV infection (DiClemente et al. 1986, 1987; DiClemente 1989). Thus, a large proportion of adolescents may not take appropriate preventive measures to reduce risk of HIV infection. Minority adolescents, in comparison to their white counterparts, are less knowledgeable about AIDS overall, and are particularly ill-informed about the effectiveness of condoms as a protective barrier against infection (DiClemente et al. 1988). What is more alarming is that adolescents have not significantly changed sexual practices nor methods of contraception as a result of the AIDS epidemic (Strunin and Hingson 1987; Kegeles et al. 1988). One group, which may be at increased risk of HIV acquisition and transmission relative to the general adolescent population, comprises severely emotionally disturbed (SED) adolescents who require inpatient psychiatric hospitalization.

In 1980, an estimated 81,000 children and adolescents required hospitalization for psychiatric treatment--16,000 in State hospitals, 17,000 in private hospitals, and 48,000 in general hospitals with inpatient psychiatric units. Recent surveys have identified an increasing trend in psychiatric hospitalization of adolescents. From 1982 to 1985, the number of adolescents hospitalized at State facilities increased by approximately 15 percent (Mandersheid and Barrett 1987), while over the 1980-86 period, private hospitals had a 200-percent increase in adolescent admittances (NAPPH 1986).

The limited data available suggest that psychiatrically hospitalized adolescents demonstrate a heterogeneity of risk-taking behaviors, such as intravenous (IV) drug use, prostitution, precocious sexuality, and homosexuality, and are likely to engage in multiple risk-taking behaviors, further increasing their risk for HIV infection. In 1980, NIMH reported that 14.5 percent of all adolescents aged 14-17 admitted to psychiatric State hospitals had drug-related diagnoses (Mandersheid and Barrett 1987). Ponton and Hartley (1987) reported that a similar proportion of adolescents (15 percent) admitted to a private, university-maintained inpatient unit had a primary diagnosis of substance abuse. Although it is difficult to determine the proportion of psychiatrically hospitalized adolescents who specifically abuse intravenous drugs, elevating the risk of HIV acquisition and transmission, overall drug use and abuse by this group is high, even with drug exclusion criteria for certain psychiatric facilities.

This chapter describes the prevalence of risk-taking behavior associated with HIV acquisition and transmission among SED adolescents admitted to an inpatient psychiatric unit. This preliminary report is based on a pilot study conducted at the University of California-San Francisco (UCSF) Adolescent Psychiatric Unit.

The UCSF Psychiatric Unit

The Adolescent Psychiatric Unit is a 21-bed inpatient facility located in the Langley Porter Psychiatric Institute at the University of California. This is one of the two major adolescent inpatient treatment hospitals in San Francisco that offer supervised training for psychiatric residents and psychology interns. The average length of stay in the Unit is approximately 48 days, similar to the 48.6-day national average. The annual caseload for 1987 was 145 patients admitted for treatment. The patient population is ethnically diverse, reflecting the general population of the San Francisco Bay area. Diagnoses are also diverse, but similar to the national statistics for adolescents in inpatient psychiatric hospitals.

Method

In fall 1987, with concern increasing about SED adolescents' risk for HIV, we began developing an HIV prevention education program for the inpatient population. The project had three objectives: (1) to collect data identifying the prevalence of SED risk-taking behavior that increases the risk of HIV acquisition and transmission; (2) to develop an HIV prevention education module designed to increase SED adolescents' knowledge about AIDS and to reduce risk behaviors associated with HIV infection; and (3) to evaluate the effectiveness of the prevention education program, both short- and long-term. Data are currently being collected and adolescents followed posthospitalization to assess program effectiveness. It must be emphasized, however, that the data presented in this chapter are preliminary, based on a pilot investigation with a small patient sample. As additional patients are accrued into the study and further refinements and modifications are made to the instruments, more precise estimates relevant to the three project objectives will be available.

Research Design

Three consecutive cohorts of inpatient adolescents were accrued into the study at approximately 6-week intervals. All adolescents admitted during the period 1 January-30 April were eligible for enrollment. Those patients who were not competent to understand questions and complete the research questionnaires were excluded from participation. Adolescents and their parents were asked to sign standard human subjects consent forms prior to participating in the project. All eligible adolescents consented to participate. Adolescents participated in the HIV prevention education program only once, even if they were still inpatients when another cohort was admitted and enrolled into the project. Each adolescent completed a baseline assessment of knowledge, attitudes, and risk behaviors, participated in group-oriented prevention education and a skill-building training program, and completed a postprogram assessment designed to evaluate changes in knowledge and attitudes and behavioral intentions with respect to high-risk behaviors. The cohorts, however, did not have identical experiences as the program and measures used evolved after the initial assessment.

The first cohort (Cohort 1) had 21 adolescents. This group completed a pretest and identical posttest AIDS Information Survey (AIS) that assessed knowledge, misconceptions, and attitudes about AIDS (DiClemente et al. 1987, 1988) as well as a Risk Behavior Inventory that assessed the prevalence of risk-taking behaviors in general, and some specific to HIV acquisition and transmission. Cohort 2 and Cohort 3 (combined n=23), in addition to these measures, were administered AIDS-specific, self-report questionnaires that assessed risk behaviors, drug use, and behavioral intentions to engage in high-risk behaviors following hospital discharge. The research measures administered to each cohort are outlined in Table 1.

Approximately 2 weeks after admission, trained counselors administered the baseline questionnaires using a group-response format in which they read aloud the questions and adolescents responded by marking the appropriate answer on the questionnaires. This administration procedure enabled the counselor to clarify misunderstandings for those adolescents whose reading skill or ability to understand written questions was limited.

MEASURES

AIDS Information Survey

The AIS was developed by one of the investigators and had been used previously in studies of adolescents' knowledge and attitudes about AIDS (DiClemente et al. 1986, 1987, 1988). The AIS is a 35-item, True-False self-report instrument composed of two subscales: a General Knowledge of AIDS scale and a Misconception of Casual Contagion scale. The General Knowledge and Misconception scales yield composite indices of their respective constructs by summing the correct responses for each of the items on the scale.

Instrument development was empirically derived and validated with adolescents aged 12-18. The reading level for completing the AIS had been evaluated and was shown to be particularly well-suited for this age group (age-appropriate). The AIS had also been used with diverse ethnic populations, similar to those participating in this project, without reported difficulty in language or readability.

Table 1. Overview of Research Design

COHORT	MEASURES
1 (n=21)	• Pre-, Post-AIS, Risk Behavior Inventory
2 and 3 (n=23)	• Pre-, Post-AIS, Risk Behavior Inventory • AIDS-Related Risk Behavior Questionnaire • Sexual Behaviors Questionnaire • Drug Use Survey • AIDS-Related Behavioral Intentions Questionnaire

The General Knowledge scale, comprising 30 True-False items, has demonstrated satisfactory levels of internal consistency (mean standardized alpha = 0.76). The Misconception of Casual Contagion scale is a five-item measure that reflects adolescents' attribution of disease to modes of HIV transmission associated with casual contact, such as kissing, touching, sharing cooking utensils, sharing clothing, and being in close proximity with persons who are infected (mean standardized alpha = 0.73).

Risk-Taking Behavior Inventory

The Risk-Taking Behavior Inventory, a 33-item, True-False self-report questionnaire, assesses types of risk behaviors adolescents have engaged in during their lifetimes. The risk behaviors are not specific to AIDS but cover a wide diversity of experiences. Some of the items are, however, relevant to HIV acquisition, such as drug use, sexual intercourse, and having been pregnant.

AIDS-related Risk Behavior Inventory

The AIDS-Related Risk Behavior Inventory is a seven-item self-report questionnaire designed to identify the types of sexual and drug-related behaviors adolescents have engaged in which are associated with HIV acquisition and transmission. Questions cover intravenous drug abuse, sharing intravenous drug needles, unprotected sexual intercourse, etc.

Sexual Behavior Questionnaire

The Sexual Behavior Questionnaire was developed at the University of California's Department of Psychiatry, Adolescent Psychiatric Unit, to identify adolescents' onset of sexual activity, frequency and type of sexual practices, condom use, number of different sex partners over the past year and month, lifetime prevalence of sexually transmitted diseases, sexual abuse, forced sex, prostitution, and homosexual experiences. This questionnaire uses True-False and multiple-choice formats to elicit responses from adolescents.

AIDS-Related Behavioral Intentions Questionnaire

The AIDS-Related Behavioral Intentions Questionnaire is a seven-item self-report Likert scale designed to measure adolescents' intentions to engage in high-risk behaviors after hospitalization. The behaviors included are those commonly associated with HIV acquisition and transmission.

Drug Use Questionnaire

Similar to the Sexual Behaviors Questionnaire, the Drug Use Questionnaire inquires about adolescents' drug use and abuse, in general, and about intravenous drug abuse, in particular.

Reliability and Validity of Self-Report Measures

A critical issue is the reliability and validity of measures of SED adolescent risk-taking behaviors, sexual practices, and alcohol/drug use. Obtaining reliable and valid responses is especially problematic because of the nature of the behaviors under investigation. Individuals, when asked sensitive questions that tap social norms, may respond in a socially desirable manner by underreporting socially undesirable behaviors, resulting in response bias.

A large body of literature, however, has been generated establishing the validity of adolescent responses to drug-use items (Kandel 1975; Single et al. 1974). Estimates of survey response bias and reliability from a review of studies of alcohol and illicit drug use that compared self-reports of current illegal drug use with urine test results, and self-reports of alcohol consumption with presence or absence of alcohol in the blood, identified a net response bias of zero. These findings suggest that, on the average, respondents do not systematically underreport undesirable or sensitive information in surveys (Marquis et al. 1986). Similarly, recent studies have shown that self-administered methods of asking sensitive questions about sexual behavior (i.e., questionnaires or computer interviews) may yield less biased responses than face-to-face interviews (Cannel and Fowler 1963; Knudsen et al. 1967; Marquis and Cannell 1971; Marquis et al. 1986; Millstein and Irwin 1983). The evidence suggests that, for sensitive topics, self-administered measures may be the most appropriate method for attaining valid and reliable information from respondents. We took advantage of this tendency by having all of the behavioral outcomes of interest measured via self-administered forms.

Results

The demographic and diagnostic characteristics of the study population are displayed in Table 2 and Figure 1, respectively. Of the combined sample (n=44), 50 percent of the adolescent inpatients were male, 61.3 percent were Caucasian, and the mean age was 15.1 years with a range from 12-22 years of age. Psychiatric diagnosis was ascertained by a review of the patient's medical record. The psychiatric diagnostic categories included conduct disorder (n=13), schizophrenia (n=10), borderline personality (n=9), affective disorder (n=5), and other diagnostic categories (n=7). Psychiatric diagnoses were derived from clinical assessments using standardized DSM-III criteria.

Table 2. Demographic Characteristics

Characteristic	Percentage	Number
Gender		
Male	50.0	22
Female	50.0	22

Characteristic	Percentage	Number
Ethnicity		
White	61.3	27
Black	15.9	7
Hispanic	6.8	3
Asian	15.9	7
Age		
Mean		15.1 years
Standard Deviation		2.7 years
Range		12-22 years
Median		15 years

Prevalence of High-Risk Behaviors

Psychiatrically hospitalized adolescents reported a high prevalence of risk behaviors traditionally associated with HIV infection as well as behaviors that were not previously identified as potential routes for HIV transmission (Figure 2). Of the more common, recognized risk behaviors, 15 percent reported using intravenous drugs, 15 percent reported sharing intravenous drug needles, 15.8 percent reported being the sex partner of an IV drug abuser, 15.8 percent reported being the sex partner of a homosexual/bisexual male, and 35 percent reported having sexual intercourse with someone whose sex history was unknown. Among those adolescents who reported using IV drugs, however, all reported sharing IV needles.

Risk behaviors not previously recognized as associated with HIV transmission were more prevalent among this population. For example, 60 percent reported cutting or self-mutilation behavior, 25 percent reported sharing of cutting implements (e.g., razors, knives) used in self-mutilation, 37 percent reported being sexually abused, and 41 percent reported having been forced to engage in sexual practices. For those adolescents reporting self-mutilation behavior, approximately 41 percent shared cutting implements. Of these adolescents, the mean frequency of cutting behavior was 3.4 occasions with a range from 1 to more than 20

Figure 1. Primary Diagnosis

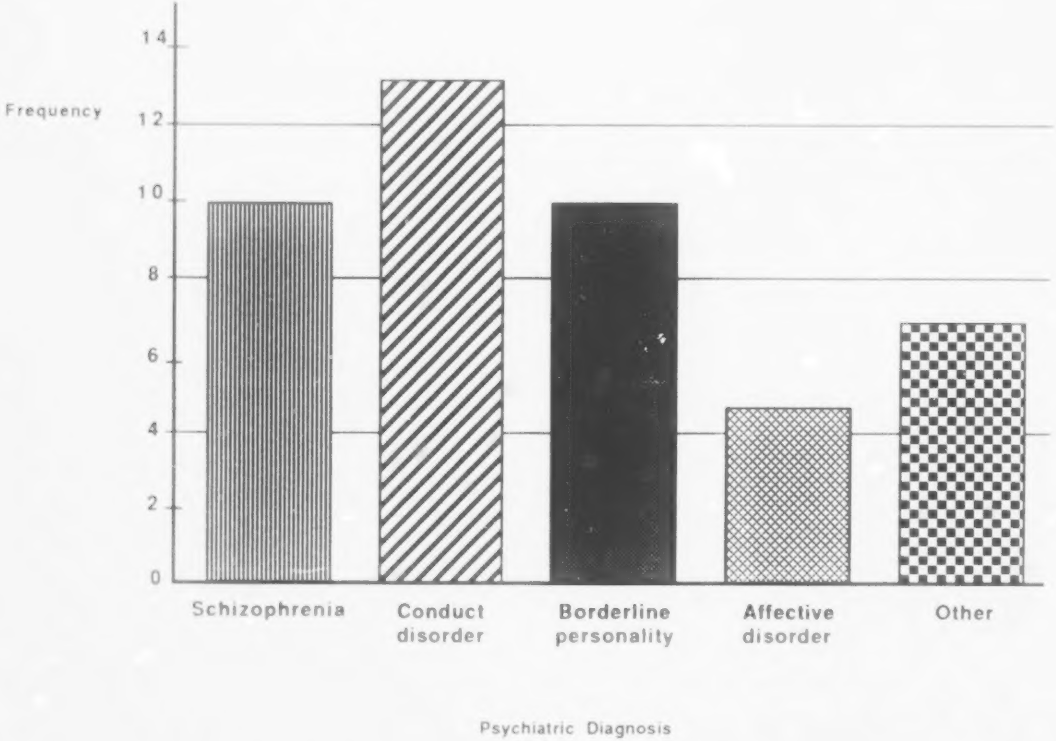
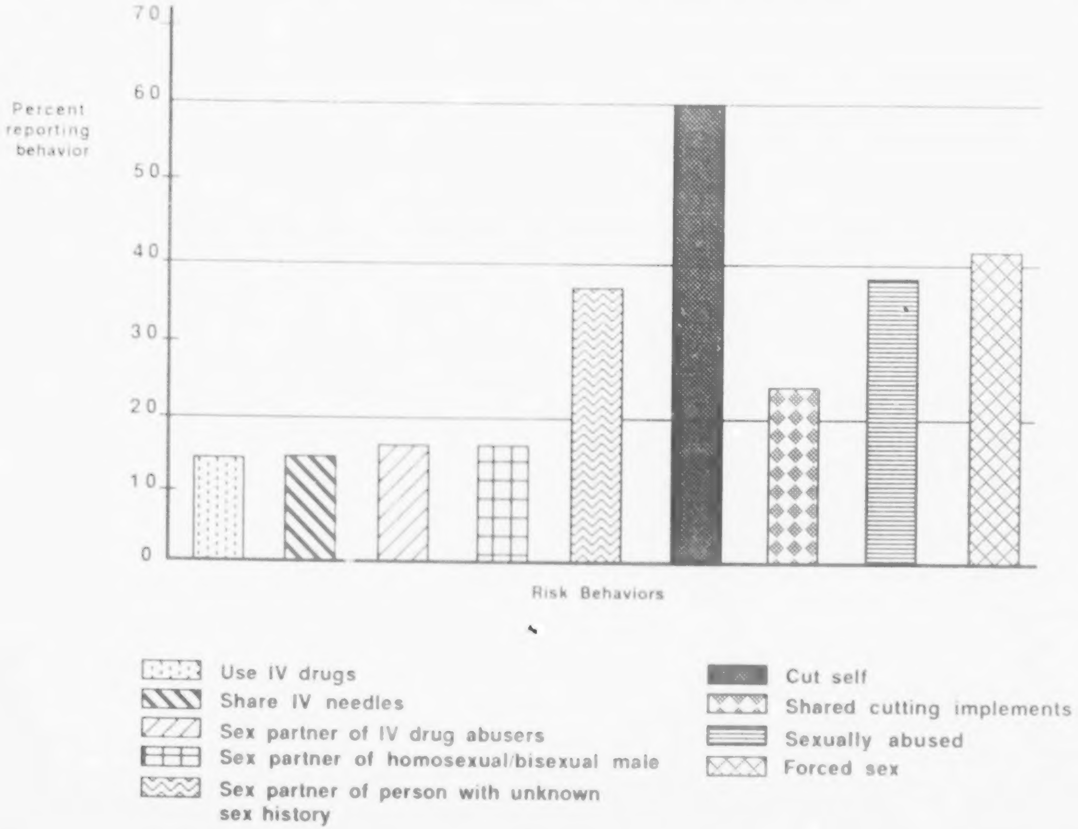


Figure 2. Prevalence of High-Risk Behaviors



times. Of those adolescents who reported being sexually abused, most reported repeated sexual abuse and almost half reported being sexually abused on three or more occasions.

High-risk sexual behaviors were also prominent among this population (Table 3). The majority of the sample reported being sexually active (56 percent) with age of sexual onset averaging 10.7 years. Condom use during sexual intercourse was infrequent, however, with almost 67 percent reporting "never" using condoms. Frequency of sexual intercourse, on the other hand was quite high, with 45.4 percent of the adolescents reporting intercourse several times a week, and another 18.2 percent reporting sexual intercourse at least several times a month.

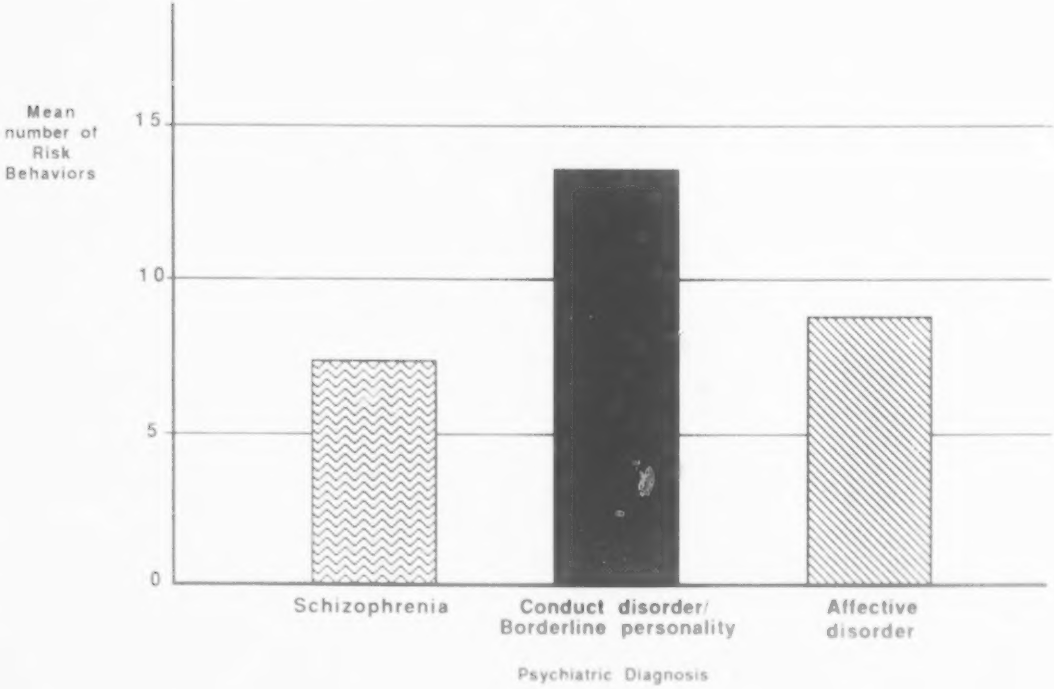
The majority of the psychiatrically hospitalized adolescents reported having multiple sex partners, with one-third reporting 9 or more sex partners in the past year. Perhaps as a consequence of these risk behaviors, 15 percent and 18 percent, respectively, of psychiatrically hospitalized adolescents reported having had a pregnancy or sexually transmitted disease. Not surprisingly, the three girls who reported having been pregnant also reported that their partners never used condoms during sexual intercourse.

Additional analyses identified a differential association between frequency of self-reported risk behaviors and adolescents' primary psychiatric diagnosis. The mean on the Risk Behavior Inventory was 11.1 risk behaviors, ranging from 0 to 26. For conceptual purposes, the diagnostic categories of conduct disorder and personality disorder were combined, and respondents with a diagnosis of "other" were deleted from these analyses. A one-way analysis of variance identified a significant association between psychiatric diagnosis and mean number of reported risk behaviors, with adolescents diagnosed as conduct disorder/personality disorder reporting substantially greater mean risk behaviors than adolescents diagnosed as schizophrenic or with affective disorders (see Figure 3).

Table 3. Sexual Behavior and Condom Use

BEHAVIOR	PERCENTAGE
Sexually Active	56.0
Condom use	
Often	16.6
Sometimes	16.6
Never	66.7
Sexual frequency	
Several times per week	45.4
Several times per month	18.2
Number of different sex partners in the past year	
1 partner only	44.4
2-4 partners	22.2
9-12 partners	11.1
17 or more partners	22.2
Age of sexual onset	
Mean	10.7 years
Range	3-15 years

Figure 3. Mean Number of Risk Behaviors by Psychiatric Diagnosis



P<0.02 by one-way analysis of variance

In subsequent analyses, we dichotomized adolescents' Risk Behavior Inventory scores into "high" or "low" risk categories using a median split and examined the relationship between primary psychiatric diagnosis and risk behavior category. Adolescents with psychiatric diagnoses of conduct disorder/borderline personality were more than three times as likely to be classified in the "high" risk category as the adolescents diagnosed as having either schizophrenia or affective disorders (Table 4).

Discussion

The present study identified a substantial prevalence of risk behaviors associated with HIV acquisition and transmission among a psychiatrically hospitalized adolescent population. A recent report (Remafidi 1987) suggests that approximately 31 percent of male adolescent homosexuals are psychiatrically hospitalized. Data on the prevalence of homosexuality among psychiatrically hospitalized adolescents have not been available, although homosexual adolescents are clearly overrepresented among psychiatrically hospitalized adolescents relative to the general adolescent population. In the present study, 25 percent of the male adolescents reported having sexual intercourse with other males. Caution is urged, however, before concluding that one-quarter of psychiatrically hospitalized adolescents are homosexuals. This population, as the data substantiate, has a high prevalence of forced sex and sexual abuse. When we control for adolescent reports of sexual abuse and forced sex, the percentage of males reporting same-sex sexual intercourse decreases to 12.5 percent. This finding, while important, would need to be confirmed with a larger patient population.

Reports of sexual abuse are common among psychiatrically hospitalized adolescents (Sansonnet-Hayden et al. 1987; Carmen et al. 1984; Rosenfeld 1979). Emslie and Rosenfeld (1983) reported, for example, that of a sample of 65 hospitalized adolescents, one-third of the girls, 56 percent of the nonpsychotic girls, 10 percent of the psychotic girls, and 8 percent of the psychotic boys reported histories of sexual abuse. No data are, however, presently available on the relationship between sexual abuse and risk of HIV acquisition.

Table 4. Relationship between Psychiatric Diagnosis and Risk Behavior Status

PSYCHIATRIC DIAGNOSIS	RISK BEHAVIOR STATUS		
	Low %	High %	n
Schizophrenia	80.0	20.0	10
Conduct disorder/ borderline personality	36.4	63.6	22
Affective disorder	80.0	20.0	5
			37

Chi-square with Yates' correction for continuity, 2 df = 6.8, P<0.04

RR (high risk) conduct disorder vs. schizophrenia = 3.18

RR (high risk) conduct disorder vs. affective disorder = 3.18

Most alarming, from a prevention perspective, is the high prevalence of self-mutilation (cutting) identified among this population. The proportion of adolescents who engage in such behavior and share cutting implements suggests that this behavior may be an important route for HIV acquisition and transmission. To our knowledge, this is the first study to identify self-mutilation as a potential risk factor for HIV infection. In conjunction with sexual abuse and forced sex, these risk factors may pose as serious a threat to adolescents' health as the more commonly recognized modes of HIV infection attributable, in large part, to their high prevalence in this particular population.

Limitations of the Study

A major limitation of the present study, which may affect the reliability of the findings, is the small sample size. This study was a pilot effect in which data were collected from three consecutive cohorts of adolescents admitted to an inpatient psychiatric unit. As the annual patient caseload is only 165 adolescents, a much longer period would be needed to accrue a suitably large sample. Unfortunately, data related to the less common routes of HIV transmission (i.e., self-mutilation, sexual abuse, forced sex) were collected for Cohort 2 and Cohort 3 only, thus further eroding the sample size and restricting the reliability of these prevalence estimates. The present study findings do, however, highlight potential areas for future research with this population as well as the need to develop and implement HIV prevention education. This population may, in fact, be most appropriately suited to implementation of a protracted HIV prevention education program, as the average length of hospitalization is 48.6 days, permitting administration of a comprehensive program.

Summary

The findings suggest that psychiatrically hospitalized adolescents may be at increased risk of HIV acquisition and transmission relative to the general adolescent population, based on the prevalence of previously recognized risk behaviors and the identification of a high prevalence of other risk behaviors, e.g., self-mutilation, sexual abuse, and forced sex. Further research with substantially larger patient populations is necessary to confirm and refine these prevalence estimates and identify associations between risk behaviors and psychiatric diagnoses.

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CHAPTER 5

HIGH-RISK YOUTHS WHO USE HEALTH CLINICS: A PROFILE OF A POPULATION ACCESSIBLE FOR AIDS-RELATED INTERVENTIONS

Arlene R. Stiffman, Ph.D., and Felton Earls, M.D.

This chapter underlines the associations among adolescents' behaviors that place them at risk for HIV infection, their mental health problems, and their use of clinic services.

Many aspects of the lifestyles of adolescents, especially those in the inner cities, seem to place them directly in the path of the AIDS epidemic (Hein 1987). The youths who constituted the sample for this chapter were all inner-city youths who were considered to be at high risk for early pregnancy, substance abuse, depression, sexually transmitted diseases, and premature death resulting from suicide or homicide. They were interviewed in the context of a study that evaluated the impact of consolidated mental health and health care specifically designed for high-risk adolescents. Therefore, the clinics involved in the study were in a position to influence the behavioral patterns that put the youths at risk for contracting HIV infection.

METHODS

Design of Original Study

The data for this study were taken from an earlier evaluation of a nationwide program initiated in 1980 by the Robert Wood Johnson Foundation. The program was designed to develop health clinics that would specifically consolidate the delivery of mental health and medical services to adolescents and young adults living in communities characterized by high rates of adolescent pregnancy, homicide, suicide, and substance abuse. The study sampled adolescents attending seven consolidated programs (located in Boston, Chicago, Indianapolis, Jackson, MS, New Haven, Dallas, and Los Angeles) or three traditional health programs that serve all age groups (located in St. Louis, Buffalo, and New Orleans).

The youths participating in the original study were all health clinic users who were selected for interviews in the order that they presented at the clinics for care. The first wave of the evaluation began in November 1984; the second wave of the study, with a medical record review component, began in November 1985. Data collection was completed in the summer of 1986. Originally, 2,787 inner-city youths from 10 cities in the United States were interviewed about their mental and physical health, their social environment, and their use of health care facilities. All the youths were at high risk for mortality and morbidity according to their demographic situation. The results of this evaluation are now completed (Earls et al., under review).

Sample

The sample was divided into three groups based on the risk level of their behaviors for contracting HIV infection: (1) those youths who engaged in the highest risk behaviors (prostitution, injectable drug use, male homosexual or bisexual behavior) and had had sexually transmitted diseases associated with genital ulcers or sores (herpes, syphilis); (2) a moderate-risk group of youths who had had more than six sexual partners in the prior year or who had had nonulcerative forms of sexually transmitted diseases; and (3) all others (low-risk youths).

Instruments

The original interviews in 1984-85 and 1985-86 asked about the youths' social environment, physical and mental health, and utilization of services. The questions about the social environment concerned family of rearing, foster or group home experiences, family history of mental illness, relationships with family and peers, and a variety of stressful events (such as violence, hunger, parental separation, serious illness/injury). The questions about physical health concerned chronic illness, injuries, sexually transmitted diseases, pregnancy, and common health problems. Questions about mental health concerned depression, suicidal ideation, conduct disorder, anxiety, somatic symptoms, symptoms of posttraumatic stress disorder, and substance use and abuse. Other questions concerned demographics and sexual, social, academic, and work behaviors. Information about mental and physical health, treatments, and such high-risk factors as drug use and sexually transmitted disease was also gathered from medical records.

Questions about sexual behavior asked about age at first sexual experience, number of partners within the last year, contacts with same and opposite sex partners, and other sexual concerns or worries that the youths might have. Questions about contraceptive use asked how often they or their partner used contraception and about the specific types of contraception used. Questions about violent behavior included injuring humans or animals, mugging/snatching, destruction of property, and being jailed for assault, rape, or murder.

From the inventory of mental health symptoms, several specific psychiatric diagnoses and total symptom counts were made. The diagnoses were based on computer algorithms that combined symptoms according to the positive criteria in DSM-III (American Psychiatric Association 1980). The questions to elicit symptoms came from the National Institute of Mental Health's Diagnostic Interview Schedule (DIS) (Robins et al. 1981; Robins et al. 1984; Robins 1985). A modified version of the DIS used for this study covered 15 diagnoses including major depression, single episode and recurrent; tobacco use disorder; generalized anxiety; posttraumatic stress; drug abuse and dependence; alcohol dependence and alcohol abuse; somatization disorder; and dysthymia.

The diagnosis of conduct disorder was based on questions from the Diagnostic Interview for Children and Adolescents (DICA) (Herjanic and Reich 1983; Reich et al. 1982). The DICA is a structured interview protocol designed to diagnose psychiatric disorders occurring in children. Levels of parent-child agreement have been established on DICA-P and DICA for individual symptoms and diagnostic categories (Herjanic and Reich 1983; Reich et al. 1982).

Analyses

Chi-squares analysis and analysis of variance were used to compare the data on three groups of youths who were at differing levels of risk for HIV infection.

RESULTS

Demographics

Eighty-six of the youths could be characterized as being at high risk for HIV infection, 453 at moderate risk, and 2,249 at low risk (see Table 1). The data show that the youths in the high-risk group were older, and whites and males were overrepresented. The youths in the high- and moderate-risk categories were more likely to be older (18) than the youths in the low-risk category. The sample itself was largely black. However, the high-risk category was almost evenly divided between whites and blacks, indicating that a disproportionate percentage of the white youths engaged in the highest risk behaviors. Similarly, the sample was largely female, yet the highest risk group was almost evenly divided between males and females, indicating that a disproportionate percentage of males engaged in the highest risk behaviors.

The high-risk youths were more likely to be homeless. This may have precipitated some of the high-risk behavior such as prostitution, or the homelessness may have been precipitated by other high-risk behaviors such as injectable drug use.

Table 1. Demographics of youths by risk category
(values given in percentages)

	High risk n=86	Moderate risk n=453	Low risk n=2,249
Age			
13	3.5	2.2	5.8
14	7.0	6.6	10.6
15	15.1	12.1	18.1
16	16.3	21.4	22.9

17	31.4	32.5	25.8
18	25.6	24.9	16.6
19	1.2	.2	.2
Race			
White (n=589)	44.2	20.3	20.5
Black (n=1978)	50.0	72.4	71.4
Other (n=220)	5.8	7.3	8.2
Sex			
Male (n=637)	50.0	34.2	19.5
Female (n=2150)	50.0	65.8	80.5
City			
Boston (n=161)	1.1	3.0	5.1
New Haven (n=273)	3.6	6.3	7.1
Indianapolis (n=369)	10.7	20.1	11.2
Chicago (n=372)	14.3	4.3	13.9
Jackson (n=392)	5.9	6.7	14.6
Dallas (n=368)	14.3	19.8	12.0
Los Angeles (n=257)	34.5	10.9	4.6
Buffalo (n=253)	0.0	6.7	4.6
New Orleans (n=282)	3.6	10.0	10.2
St. Louis (n=393)	11.9	12.2	13.6
Homeless	3.5	.7	.1

Sexual risk behaviors

The high-risk youths had earlier sexual experiences and had more sexual partners than the youths in the other groups. One-third of the high-risk youths had a sexual experience at age 11 or younger, and almost 80 percent had sex prior to age 15 (see Table 2). In contrast, a quarter of the low-risk youths had never had sexual intercourse.

In the year prior to the interview, three-quarters of the high-risk youths had more than one sexual partner, and one-quarter of both the high- and moderate-risk groups had seven or more partners. By definition, none of the low-risk youths had more than seven partners. In fact, 75 percent of the low-risk youths had one or no sexual partners in the last year.

Almost half of the high risk youths had engaged in prostitution, with one-fifth engaging in it regularly. By definition, neither the moderate- nor the low-risk group had any individuals engaging in prostitution.

Almost one-quarter of the high-risk youths had homosexual experiences. By definition, all males with homosexual experiences were in the high-risk group. A few females in the other groups had bisexual or homosexual experiences.

Table 2. Sexual risk behaviors of youths by risk category
(values given in percentages)

	High risk n=86	Moderate risk n=453	Low risk n=2,249
Age at first sex experience			
Never	0.1	4.0	26.1
11 or younger	33.7	14.8	5.2
12-14	43.0	42.2	31.2
15+	22.1	39.1	36.6

Number sex partners in last year			
0	9.3	5.3	30.7
1	15.1	32.5	45.0
2-6	48.8	34.9	24.3
7-19	18.6	23.4	0.0
20+	8.1	4.0	0.0
Prostitution			
Never	53.5	100.0	100.0
1-2 times	9.3	0.0	0.0
3-9 times	16.3	0.0	0.0
10+ times	20.1	0.0	0.0
Homosexual experience	23.3	1.1	0.2

Protection in sexual activities

Questions about contraceptive use by the youths or their partners were asked of all the youths who had ever had sexual intercourse. Despite the greater number of sex partners, almost half of the high-risk youths (or their partners) never used contraception. At least 40 percent of the moderate- and low-risk groups also never used contraception. However, despite the high number that did not use contraception in all groups, the regularity of use differed among those in each group that did use some contraception. Less than one-third of the highest risk youths used contraception most of the time, while approximately half of the moderate- and low-risk youths used contraception most of the time (see Table 3). Although we do not know the youths' usual method of contraception, less than 20 percent of any group of youths used condoms. Furthermore, despite the high rates of sexual activity with multiple partners in the high-risk group, their rates of condom usage were lower than the moderate-risk and low-risk groups.

Table 3. Use of protection in sexual activities by sexually active youths
(values given in percentages)

	High risk n=84	Moderate risk n=428	Low risk n=1,569
Use of contraception			
Never	46.4	40.0	43.4
Seldom	17.9	5.6	5.7
Half the time	5.6	6.5	4.6
Most of the time	29.8	47.9	46.3
Use of condoms	13.9	20.9	15.7

Venereal disease history

One-third of the high-risk and moderate-risk youths admitted to having had a sexually transmitted disease (STD). By definition, none of the low-risk youths had such a disease. Despite similar rates of STD in the two groups, one-third of the high-risk youths had their first sexually transmitted disease by age 15, while less than 10 percent of the moderate-risk youths had STD that young (see Table 4).

Table 4. Venereal disease history of youths by risk category
(values given in percentages)

	High risk n=86	Moderate risk n=453	Low risk n=2,249
Sexually transmitted disease (STD)	37.2	34.2	0.0
Age at first STD			
Never	62.8	66.0	100.0
11	1.2	.4	0.0
12	1.2	0.0	0.0
13	3.5	1.5	0.0
14	3.5	2.2	0.0
15	25.0	5.3	0.0
16	3.5	9.3	0.0
17	11.6	8.8	0.0
18	9.4	6.4	0.0
Type of STD			
None	37.2	33.8	100.0
Gonorrhea	12.8	26.9	0.0
Syphillis	10.5	0.0	0.0
Herpes	4.7	0.0	0.0
PID	0.0	1.3	0.0
Chlamydia	0.0	1.5	0.0
Other	9.3	4.0	

Nonsexual risk behaviors

The high-risk youths drank more, used drugs more, and engaged in more violent behavior than the other youths (see Table 5). Two-thirds of the high-risk youths, less than half of the moderate-risk youths, and only one-quarter of the low-risk youths were regular users of alcohol. One-fifth of the high-risk youths injected drugs, while, by definition, none of the other youths used such drugs. Although the high-risk group had substantially higher rates of violent behavior, the general level of violent behavior in all groups was very high. Three-quarters of the high-risk youths, half of the moderate-risk youths, and almost one-third of the low-risk youths engaged in violent behaviors. Approximately 2 percent of the high-risk and moderate-risk youths, and almost 1 percent of the low-risk youths, reported they had been jailed for assault, rape, or murder.

Table 5. Nonsexual risk behaviors of youths by risk category
(values given in percentages)

	High risk n=86	Moderate risk n=453	Low risk n=2,249
Regular alcohol use	64.0	45.3	23.6
Injectable drug use	20.9	0.0	0.0
Violence	73.3	48.8	31.6
Jailed for assault, rape, or homocide	2.3	1.6	.8

NOTE: Percentages do not total 100 because individuals could be counted in more than one category.

Mental health diagnoses

The high-risk youths were significantly more likely than the other groups to meet DSM-III criteria for drug abuse or dependence, alcohol abuse or dependence, depression, or conduct disorder. They were also more likely to have attempted suicide (see Figure 1). Twice as many high-risk as moderate-risk, and more than three times as many high-risk as low-risk youths met criteria for drug abuse/dependence and conduct disorder. Almost four times as many high-risk as moderate- risk, and nine times as many high-risk as low-risk youths met DSM-III criteria for alcohol abuse/dependence. Three times as many high-risk as moderate-risk, and four times as many high-risk as low-risk youths met criteria for major depression. Similarly, almost three times as many high-risk as moderate-risk, and four times as many high-risk as low-risk youths had attempted suicide (see Figure 1).

Mental health symptoms

Conduct disorder and depression can also be examined in terms of the numbers of symptoms. The high-risk youths had the most symptoms of depression and of conduct disorder (both aggressive and nonaggressive). They averaged 6 symptoms of depression and 2 1/2 symptoms of conduct disorder, while the other groups had less than half as many symptoms (see Figure 2).

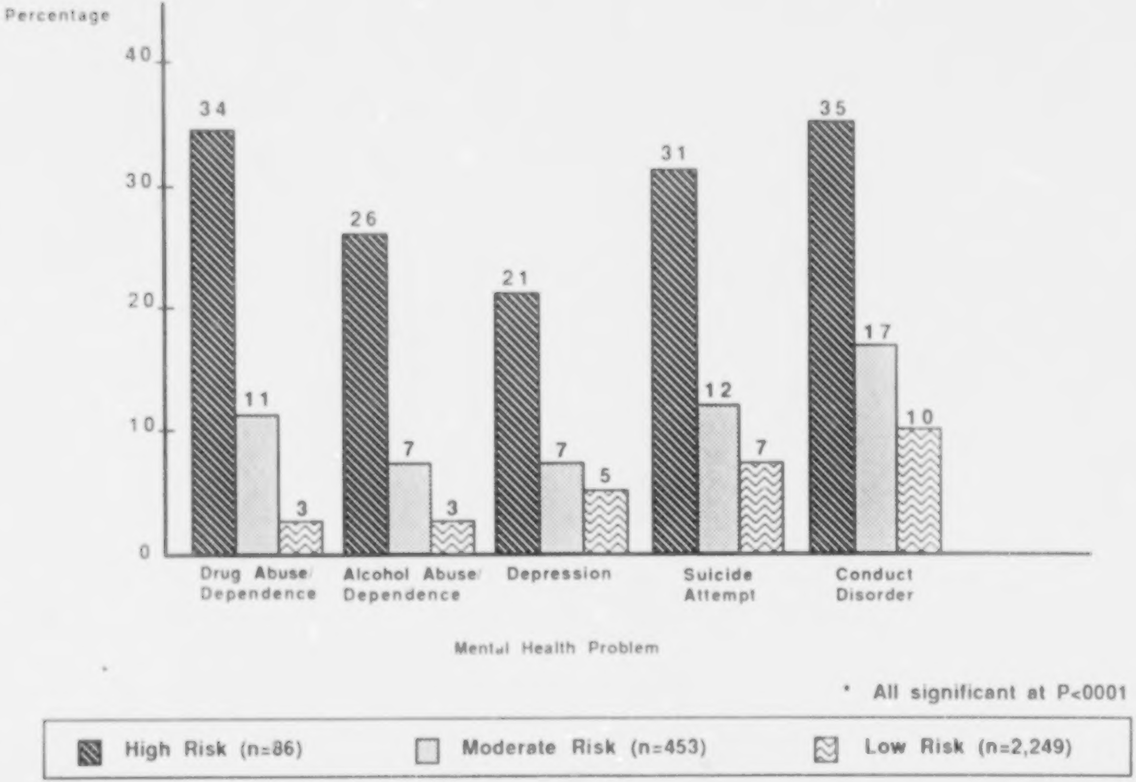
Help-seeking/receiving

Despite the much higher rates of mental health problems in the high-risk group, they did not have higher rates of seeking help (or receiving help) from the clinic for those problems. Typically, less than one-third of the youths with problems sought help for them, unless the problems were related to depression or suicide, in which case half to two-thirds of the youths sought help. The help-seeking rates of males and females did not differ significantly (see Figure 3).

Help-seeking by high-risk youths for specific problems

Only half of the high risk youths who engaged in homosexual or bisexual behavior sought any help from the clinic for their sexual concerns. Even then, the help was often for some sexual concern other than their homo- or bisexuality.

Figure 1. Mental Health Problems of Youths at Varying Risk for HIV Infection*



* All significant at P<0001

Figure 2. Number of Mental Health Symptoms of Youths at Varying Risk for HIV Infection*

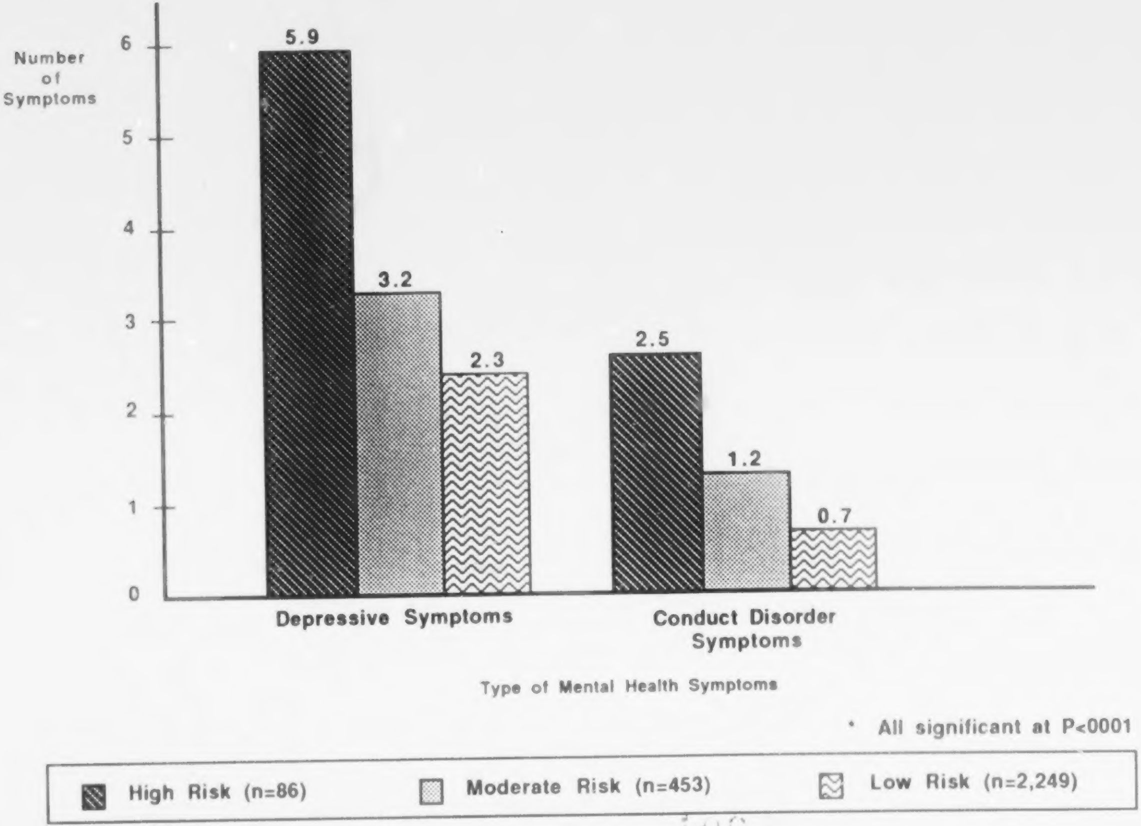
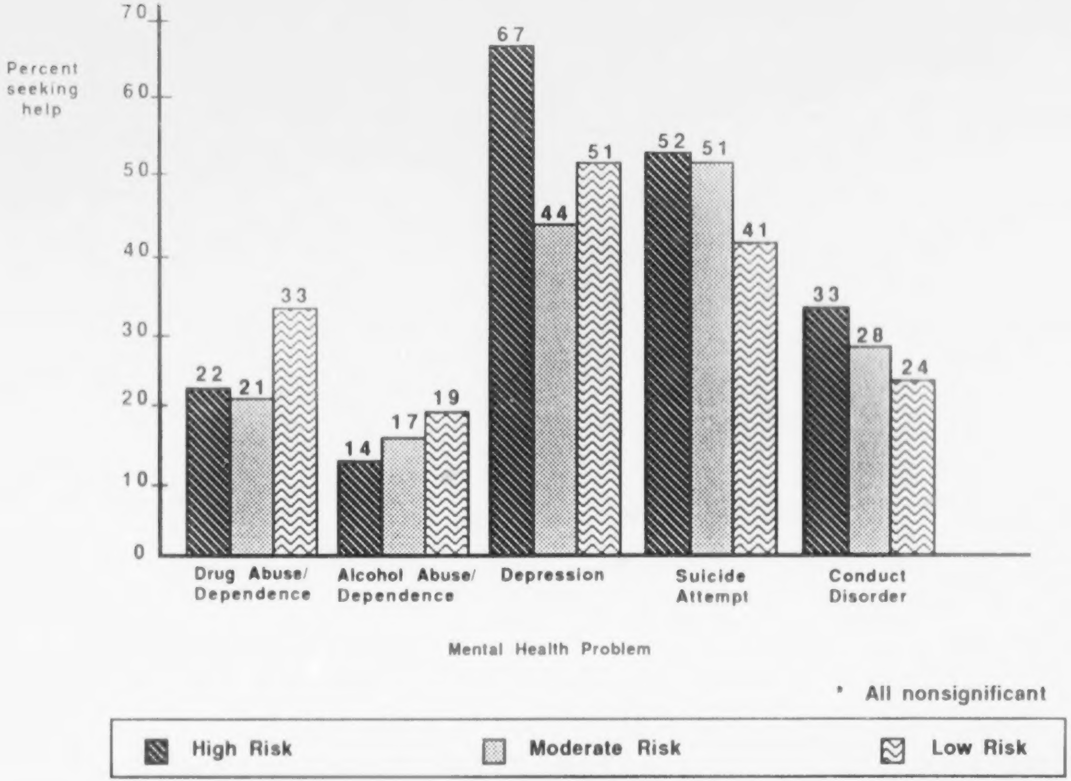


Figure 3. Help-Seeking by Youths with Mental Health Problems Who Are at Varying Risk for HIV Infection*



* All nonsignificant

Only one-third of the youths engaging in prostitution or using injectable drugs received any related help from the clinic. Thirty-three percent of the youths who engaged in prostitution received help for behavioral or conduct problems. Again, the behavioral problems they received help with were often not specific to the prostitution. Only 33 percent of the youths who used injectable drugs received clinic help for drug abuse or dependence problems.

In contrast, all the youths who reported having a sexually transmitted disease sought or received help from the clinic for that problem (see Figure 4).

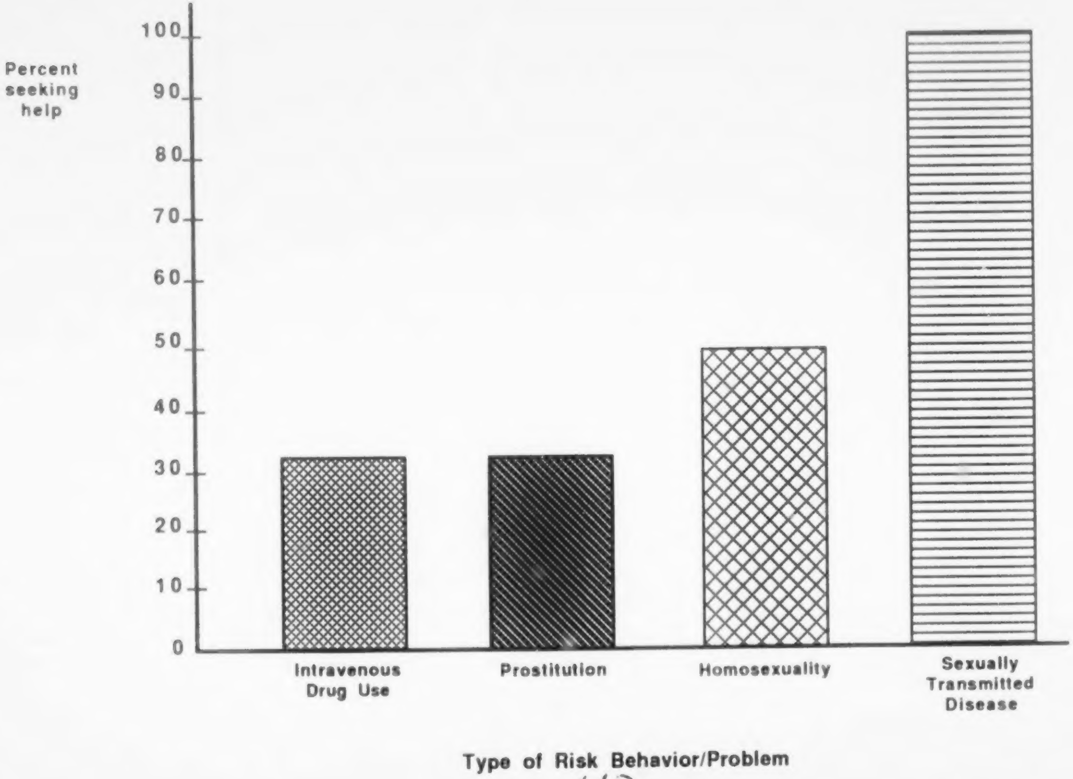
Discussion

This study sample comprised health clinic users. These youths are available for interventions, so the findings can shed light on a population that both needs AIDS-related information and is potentially among the most accessible group for receiving that information. To our knowledge, this is the first time that inner-city, high-risk youths have been categorized by their AIDS-related risk behaviors.

The results must be interpreted within the limitations imposed by the sampling procedures. The sample is unrepresentative of the general population of [illegible] to 18-year-olds because all the youths were using inner-city health clinics. Also, the data were derived from self-reports, so the actual incidence of such risk factors as IV drug use, homosexual or bisexual behavior, prostitution, or STD may be much greater within this population. (We do have independent medical records, but that information is not included in this chapter as it was typically fragmented and incomplete.) Finally, the youths were interviewed prior to a general awareness of the impact of the AIDS epidemic on youths, so no specific questions were related to AIDS.

Despite the limitations cited above, the findings clearly showed that youths at risk for HIV infection engage in a broad variety of risk behaviors and have many associated mental health problems. Nevertheless, very few receive help for those mental health problems. In contrast, the youths have high rates of sexually transmitted disease, and most come to the clinic for help.

Figure 4. Help-Seeking by High-Risk Youths for Problems Related to HIV Transmission*



These results lead to the following conclusions about potential interventions with this population. Any interventions to change the behavior of these types of high-risk youths must recognize the extremely troubled nature of the population. Hopes for behavior change must be tempered by a recognition of the youths' predilection to impulsive behavior and their lack of concern with self-protection, as indicated by the high rates of suicide attempts, high rates of violent behavior, and low contraceptive use.

Furthermore, despite the behavioral aspect of a large portion of their AIDS-related risk behavior, the data indicated that interventions to change behavior should not be located in mental health facilities, as youths seldom use them. Because such a high proportion of the highest risk youths have STD, and because all obtain treatment for STD, it appears that the most promising approach to these youths might be through health clinics that provide treatment and screening for STD. These clinics could add a mental health/behavior change component.

This study highlights the need for research with these types of youths. We need to know how the youths' behaviors change as they reach young adulthood, and how their mental health and behavioral problems affect their ability to understand AIDS-related information and to act upon that knowledge. We hope to follow these young people to see how their risk behavior changes over time in relation to their exposure to knowledge about AIDS and their understanding of preventive behaviors, and how these changes are affected by their associated mental health and behavioral problems. We also want to know, given their risk behaviors, their rates of HIV infection over the coming years.

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CHAPTER 6

AIDS AND THE SEXUALLY ABUSED ADOLESCENT

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The human immunodeficiency virus (HIV) that leads to AIDS is transmitted through three mechanisms: heterosexual or homosexual activity with an infected person; direct contact with infectious blood through transfusions (most occurring before HIV screening of all blood products was implemented in 1985), intravenous drug use, or accidents; and perinatal transmission from an infected mother to her infant. Additional routes have been suggested but these have not been confirmed.

Recently, the adolescent population has been identified as a group potentially at high risk for AIDS because of its sexual activity and experimentation with drugs. Moreover, studies of adolescents in school settings indicate that students are often misinformed about the means of HIV transmission, who is at highest risk, and modes of prevention (DiClemente et al. 1986, 1987; Strunin and Hingson 1987). To further complicate matters, adolescents receive conflicting messages about sexual behavior, sexual responsibility, and drug experimentation from the media, peers, and adults (Hayes 1987; Reisman 1989). Adolescents who are involved in indiscriminate sexual behavior, drug abuse, and other antisocial acts have often been subjected to earlier sexual trauma and abuse. Sexually abused youngsters, whether male or female, could be exposed to AIDS by sexual acts or by direct contact with infected blood. The probability of becoming HIV-infected from a single nonconsenting sexual encounter with an infected person is not known. However, other sexually transmitted diseases (STDs), such as syphilis and gonorrhea, are known to have a high risk of transmission from a single encounter (Peterman et al. 1986). Within this population of chronically troubled adolescents, both sexual exploitation and perpetration are high, and thus the risk of exposure to the AIDS virus is of great concern.

This chapter focuses on a subpopulation of adolescents believed to be at risk for HIV exposure: those adolescents with undisclosed or untreated sexual abuse as a child, whose behavior suggests that they are emotionally disturbed.

Risk Factors for Victims of Sexual Abuse

To understand the HIV risk level for victims of sexual abuse, we need to understand the behavior of offenders. Sex offenders have multiple sexual deviations and sexual practices (Ressler et al. 1988) that place them in a high-risk carrier status. The underreporting by victims has kept us from realizing the full extent of the rape problem; however, the study of sex offenders has shown the staggering numbers of victims they assault in their rape careers (Abel et al. 1985).

We do not know the probability of HIV infection for anyone. Since sexual assault is generally violent, the sexual penetration of a body orifice (vagina, anus, or mouth) presents a greater threat to the integrity of the skin and mucous membrane than consensual sexual activity; tissue damage, ranging from microscopic tears not noted by visual examination to obvious lacerations, can occur. In females with nonestrogenated tissue (the young and the elderly), there is an even greater threat to skin integrity and hence a greater likelihood of virus transmission if the abuser is seropositive. While all rape is both physically and psychologically traumatic, the degree of force and the tissue sensitivity must be factored into the risk of viral transmission. When sexual abuse is ongoing, as in incest (one offender/one victim) and sex rings (multiple victims), the opportunities for virus transmission are increased.

There are no statistics on the number of victims who have been assaulted by an HIV-infected offender or who convert to a seropositive status as a result of abuse. However, as recently as May 12, 1988, the *Medical Tribune* reported five documented preadolescent cases from New York; one case involved incest and the father-abuser died of AIDS in 1984.

Victims are aware of their risk of acquiring a sexually transmitted disease. They know AIDS is an STD, and prevention of STDs is part of most sexual assault protocols; thus, victims are beginning to ask about exposure to AIDS. We have learned from adult rape victims that whether or not victims are seropositive for the AIDS antibody, their anxiety over the possible exposure is trigger enough for serious concern (Baker et al. 1989).

The followup counseling of all sexual assault victims (i.e., child, adolescent, and adult) has not been impressive. Barriers on the part of victims include beliefs that they can recover on their own, that time will take care of everything, or that it is a sign of weakness to be counseled.

Barriers on the part of mental health providers include traditional methods of counseling that require the patient to initiate treatment. Children often are not counseled because of parental attitudes rather than any resistance on the part of the children. Also, neutralizing of traumatic experiences, through techniques that stimulate memory, risks, for some, keeping anxiety and intrusive thoughts prominent in the victim's consciousness. Therapy has to engage the victim in an understanding of the phenomenology of memory neutralization, and at the same time, provide the victim with strategies to control the anxiety.

Child Sexual Abuse

Since the early 1960s, a considerable body of research has focused on child abuse and, in the past decade, on child sexual abuse (Finkelhor 1986). We have learned that such abuse is quite common. In 1976, the National Center on Child Abuse and Neglect commissioned a comprehensive study of the incidence of child abuse and neglect. Extrapolating from 26 counties to the nation as a whole, the National Incidence Study estimated that 44,700 cases of sexual abuse, or 0.7 per 1000 children, were known to professionals in the year beginning in April 1979. Since 1976, the American Humane Association has conducted an annual national analysis of official reports of child abuse and neglect. In 1984, approximately 13 percent of the cases of child maltreatment were identified as sexual abuse. Extrapolating from this study, the American Humane Association estimated that 110,878 children were reported as victims of sexual maltreatment in 1984.

Critical issues surround the definition of child sexual abuse. Definitions range from subjective descriptions by the victim to observer-related indices of severity of abuse. Several clinicians and researchers use a multiple-item instrument designed to categorize whether the abuse was forced, pressured, or witnessed (Groth 1979; Wyatt and Peters 1986; Risen and Koss 1987; Burgess et al. 1987).

Response Patterns to Untreated Child Sexual Abuse

What happens to the untreated sexually abused girl as she matures? Often, the abuse leads to internalizing behaviors. Many victims neither disclose nor seek treatment for the abuse per se but exhibit symptoms such as running away, sexual identity conflicts, substance abuse, suicide attempts, or body mutilation. These problems frequently persist into adulthood. When psychiatric help is sought, such victims are assigned a variety of diagnoses, including major depression, adjustment disorder, alcohol or mixed substance abuse, personality disorder, multiple personality, anxiety disorder, psychotic disorder, psychosexual dysfunction, and posttraumatic stress disorder.

In a recent study by Craine, Henson, Colliver and MacLean (1988), 51 percent of a sample of 105 female State hospital patients were found to have been sexually abused as children or adolescents. In the majority of cases, hospital staff were unaware of the patients' histories of sexual abuse, and only 20 percent of the abused patients believed they had been adequately treated for sexual abuse.

Sixty-six percent of the abused patients met the criteria for posttraumatic stress disorder, although none had received that diagnosis. Every patient who had been sexually abused exhibited compulsive sexual behavior, chemical dependency, sadomasochistic sexual fantasy, sexual identity issues, chronic fatigue, and loss of interest in sex.

What happens to the abused boy as he grows up? Often, the response pattern is one of externalizing behaviors. Finkelhor's review of studies on child sexual abuse noted that large numbers of abused boys show up as adults in general research surveys of sexual behavior and in police-based studies, rather than clinical-based studies (Finkelhor 1984).

Some of the long-term effects of boyhood victimization have been found in studies of sex offenders (Groth 1979; Seghorn et al. 1987). The major finding in an FBI study of 41 serial rapists (more than 10 rapes) was the large numbers of victims. These men had more than 1,200 attempted and completed rapes, with 200 convictions. Retrospective reconstruction of the sexual activities and assertive behaviors of these men revealed that 51 percent had reenacted the abuse as a preadolescent, with their earliest victims being neighborhood girls (48 percent), sisters (25 percent), or girlfriends (25 percent). The onset of rape fantasies in midadolescence (mean age 16.9) crystalized the earlier sexual behaviors into spying, fetish burglaries, molestations, and rapes. These repetitive juvenile behaviors became set in adult criminal patterns (Burgess et al. 1988).

Finkelhor (1984) estimated that somewhere between 46,000 and 92,000 boys were victimized each year, and the number of girls victimized may be three times higher. If even a fraction of these estimates are reliable, the magnitude of the problem is enormous.

Sexually Abused Children as Adolescents

The linking of childhood sexual abuse to subsequent life problems is not a new idea; however, the addition of a fatal disease through an HIV infection is. Using disparate samples of former child sexual abuse victims, runaway youths, and convicted juvenile and adult sex offenders, Burgess and colleagues attempted to understand what might operate in conjunction with sexual abuse to produce drug use, juvenile delinquency, and criminal behavior. While this study did not focus on HIV infection, the sexual and drug behaviors examined could easily place these adolescents at risk for exposure to the virus.

The conceptual framework for the project--traumatic event processing--guided the study design and provided a basis for interpreting findings from the study of victims and victimizers. The model used three critical phases of traumatic experiences and a cognitive-behavioral structure of information processing of traumatic events. Data for Phase 1, the period just prior to the traumatic event, included the child's age and personality development, the history and structure of the family, and the child's history of previous trauma. Phase 2, the period of abuse and exploitation of the child, included data on the offender's behavior (e.g., operation and organization of the sex ring), the child's coping and defensive responses, and the "trauma learning" or stored information regarding the traumatic event. This stored information is remembered through sensations, perceptions, and cognitions. When the abuse remains undisclosed, the trauma is encapsulated. Trauma replay is critical here; re-enactment, repetition, and displacement associated with the victimization now occurs with other children. Phase 3, disclosure of the offender's activities, includes the social responses of others to finding out about the abuse and the behavior of the child following such disclosure.

The outcome responses of victims fall into six broad categories: (1) integration of the trauma in a healthy and productive manner; (2) avoidance of the implications of the trauma to present restricted life patterns; (3) highly symptomatic and socially limiting patterns; (4) overt psychotic adjustment; (5) delinquent and socially deviant patterns; and (6) predator, abusive, and violent patterns.

The study demonstrated that sexual abuse can shape the cognitive and behavioral patterns of the child's developing personality. The cognitive operations and defensive structure of child victims of sex rings became reshaped in order to survive the ongoing experiences. Their strategies included dissociation, denial, ego fragmentation, drive disharmony, and splitting. These mechanisms affected the child's developing cognitive organization and impulse regulatory activity.

These defensive structures were potential outcomes for children whether or not they disclosed the abuse. In addition, the reaction of the social system to disclosure of sexual abuse was an overwhelming event. Did these children have difficult outcomes because of the disclosure, the abuse, or both? The data suggested an interaction based on the child's manner of processing trauma. After disclosure and its concommitant social system response, children used additional mechanisms and behaviors to adapt.

Emotional support, in and of itself, was not enough to dissipate the anxiety of remembering or thinking about the event. Many people believed they were being supportive to the child, but then avoided dealing with the event and its sequelae to help the child process the anxiety. The survival strategies used by children are protective, and it is often necessary to wait till the victim is ready to talk. The study provided ample data on how children can seal over a trauma but have difficulty later. Often a subsequent crisis (when defenses are lowered) provides a window for dealing with the prior trauma. The demand for integration and a sense of self is greater as the child ages, which suggests why adolescents may evidence a different symptom pattern than children.

In the analysis of data from a group of 34 adolescents 6 or 8 years after they had been sexually abused and 34 control subjects who had not been abused, drugs were found to play a very important role in the abuse (Burgess et al. 1987). Drugs and alcohol were initially provided the child by the abuser to help the child control tension, symptoms, and thoughts associated with the victimizing experience. The children continued to use these substances to ward off the stress associated with the response of family, peers, and outsiders to discovery of the abuse.

The selection of psychedelic drugs and amphetamines (stimulants and activators of imagery) and heroin (an antithesis for rage and aggression) suggests the need by some of these young people to either maintain visual stimulation and heighten their level of sexual agressiveness or block sensation. Drug choice is generally not considered to be a random phenomenon but, rather, self-medication to either subdue or heighten tension (Khantzian 1985; Wieder and Kaplan 1969; Milkman and Frosch 1983; Krystal and Raskin 1970). A grave concern is that the trauma requires continuous self-medication by the young victim, thus increasing the probability of HIV infection through drug use.

INTERVENTION

Intervening with the sexually abused adolescent who also has fears of possible exposure to HIV presents many challenges. Because of the recent findings of the effects of untreated childhood sexual abuse (Briere and Runtz 1987; Conte and Schuerman 1987; Murphy et al. 1988) and the implications for the emotionally disturbed adolescent, clinicians must be alert not only to the youth's presenting problems, but also to the possibility of undisclosed abuse, with possible HIV exposure, in the youth's background. Emotionally disturbed adolescents who have heretofore resisted the helping efforts of concerned individuals because of untreated past abuse may now seek assistance because of the fear of HIV infection. Helping professionals need to appreciate the clinical differences between abused and nonabused adolescents in order to develop an effective treatment plan and to overcome the youth's resistance to participating in the plan.

Levels of Intervention

The general intervention principles for treating the sexually abused child are explained elsewhere (Burgess and Grant 1988). This section outlines three levels of intervention for the sexually abused adolescent depending on whether the sexual abuse has just occurred and the victim is suffering acute posttraumatic stress disorder (level 1), was untreated and is now chronic and internalizing (level 2), or is now chronic and behaviors are externalizing (level 3).

Level 1: This approach is aimed at victims who disclose the sexual abuse promptly (i.e., within 1 month) and includes rape (forced sexual penetration without consent). It is necessary to find out the history of the youth's disclosure and the reaction of the family. Currently, victims are spontaneously raising their concern over exposure to HIV infection. Treatment centers should have written guidelines for counseling victims about HIV testing.

In the acute phase following sexual assault, there is a great deal of disorganization in the victim's lifestyle. The clinician who sees the adolescent within hours of the assault will note impact reactions of (1) the expressed style, in which feelings of fear, anger, and anxiety are shown through such behaviors as crying, sobbing, smiling, restlessness, and tenseness; or (2) the controlled style, in which feelings are masked or hidden and a calm, composed, or subdued affect is noted.

In the first several weeks after a rape, the following acute somatic manifestations may be evident: physical trauma, skeletal muscle tension, gastrointestinal irritability, and genitourinary disturbances. A wide gamut of emotions and feelings may be expressed, including fear, humiliation, embarrassment, anger, revenge, and self-blame. Fear of physical violence and death is usually the primary affect experienced during the rape. The possible HIV exposure adds a further fear dimension to the experience, and the therapist needs to review with the victim current information about transmission of HIV in sexual assault populations.

The long-term process of reorganization is the second phase following sexual assault. Although the time of onset varies from victim to victim, this phase often begins several weeks after the assault or identification of the rape. Various factors affect the coping behavior of victims regarding the trauma, e.g., ego strength, social network support, and the way people treat them as victims. The victim may show excessive restlessness and anxiety, noted through changing residence, taking trips, changing telephone numbers. Intrusive thoughts of the rape break into the victim's waking consciousness as well as into their dreams. Excessive fears and phobias may develop around cues associated with repressed memories of the rape itself, as a defensive reaction to the circumstances of the assault. Some of the common phobias include fear of indoors, outdoors, being alone, crowds, people behind them, and sexual encounters and activity. The fear of HIV exposure is added to this list of phobias.

The posttrauma intervention has biologic, social, cognitive-behavioral, and psychological dimensions (Burgess and Holmstrom 1986). Followup of adolescents with sexual trauma is critical for testing for possible HIV exposure, since it may be several weeks or months before the body produces antibodies that can be detected in standard tests. The mechanism for ruling out sexually transmitted diseases has been incorporated into many physical examinations and laboratory tests. AIDS testing, however, requires followup over time.

Level 2: This assessment is for the adolescent who has been in a sexually abusive situation for at least 1 year. These situations include incest and sex rings. In addition to the level 1 assessment, these adolescents need to be evaluated for general physical and sexual health, especially for sexually transmitted diseases and HIV infection, and drug and alcohol use. Internalizing behaviors generally dominate.

If a diagnosis of chronic posttraumatic stress disorder is made, the next treatment issue is to evaluate the dominant character organization of the youth and to appreciate its cognitive defensive structure. The clinician, by working within that defensive structure, can confront the behaviors aimed at blocking thoughts that inhibit the youth's capacity to express vulnerability. This vulnerability is rooted in the abuse experience and is psychologically experienced through humiliation, betrayal, and powerlessness. The victim may also have been blamed or told that the activities were asked for or wanted.

Treatment of the internalizing victim is complicated by the youth's unconscious identification with the aggressor and the split from vulnerability. In addition, there is conflict in terms of right and wrong, assertiveness and aggressiveness, and sexuality and deviance. This response to sexual abuse includes highly avoidant and anxious behaviors as well as psychotic or disorganized behaviors. One notes the proneness to revictimization and the propensity to repetitive sexual behavior sometimes called promiscuity. These trauma-specific behaviors have major implications for AIDS exposure and STDs.

If the youth tests HIV positive, counseling takes on an added dimension. Health education for behaviors supportive of maintaining the immune system is initiated as well as attention to concerns over sexual practices with others.

Level 3 is aimed at the adolescent with a long childhood history of ongoing sexual abuse who has continued sexualized relationships. These youths are generally older and exhibit externalizing behaviors. They must be evaluated for perpetrating sexually aggressive acts. Adolescents labeled "tough kids," who carry weapons and survive on the streets by criminal means, may be under the influence of another person, such as a pimp or a drug boss, and thus require special protection from these exploiters. In addition to level 2 assessment, these youths need to be stabilized in a safe environment; helped to use existing skills, if any, for work; helped to decrease their tension and anxiety; detoxified for drug and alcohol abuse; and assessed for potential aggression toward themselves or others. The ethical and legal aspects of testing these adolescents for AIDS must be handled according to agency protocol. For all adolescents with unresolved sexual abuse who are in treatment, sexual acting out and sexual abuse of others must be evaluated for their defensive aims as well as their grounding in identification and modeling. In the latter, sexual and aggressive arousal dominate the behavior. Youths who have been repeatedly sexually abused may adopt both passive and aggressive behaviors regarding sex. Treatment will require resolution of the unresolved trauma and integration of aggressive and avoidant patterns.

In untreated sexually abused adolescents who develop a response pattern that includes identification with the adult perpetrator and a fixation on combining sex and power, the behaviors are externalized and exploitive in activities with peers of both sexes. When these behaviors are coupled with the adolescent's refusal to acknowledge his or her own vulnerability, such as susceptibility to sexually transmitted diseases including AIDS, we encounter a transmitting population that is out of control.

Treatment of externalizing victims is complicated by having to deal with the aggressive manifestations of the posttrauma response. Another treatment issue concerns the disclosure aspect of the abuse. Disclosure confronts males with issues of bisexuality. The offender may have told male victims they would be able to function sexually with girls, but with disclosure these boys are confronted with their homosexual activities. Gender identity, sexual preference, and sexual performance become key clinical issues. Suicide may be seen by some boys as a way to gain relief from confusion.

In short, treatment protocols for sexually abused youth should include measures for assessment of cognitive, psychological, and social functioning; the impact of the victimization experience on the social network of the victim; and strategies for confronting avoidant and acting-out responses of the youth and for addressing the sexualization of relationships and the acting out of deviant patterns.

Increasingly, we are finding that whether the adolescent manifests aggressive externalizing problems or internalizing problems, the additional sexual acting out of these young people is often compounded with the use of drugs. Thus, the emotional instability, sexual acting out, and drug abuse all increase the risk of HIV infection.

Summary

Because rape and sexual assault continue to be largely unreported, health care professionals need to be alert for undisclosed sexual trauma. For example, any adolescent with a sexually transmitted disease should have sexual trauma ruled out. It is critical that curriculum content on rape and child sexual victimization as well as AIDS transmission be added to basic professional programs such as nursing, medicine, psychology, social work, education, and law enforcement. Also, this curriculum content should be provided through continuing educational courses to practitioners such as marriage, family, and sex therapists; child psychiatric nurses; and psychiatric social workers. This content can be provided through workshops and seminars.

The trauma-specific responses of child victims abused over time (e.g., sexualized, compulsive behaviors; victim-to-victimizer linkage pattern) suggest that adolescence is a particularly critical time for education about AIDS prevention. It is essential for all health care professionals to be trained in the dynamics of victimization and patterns of trauma and recovery. Also, a concerted effort is needed to implement sound treatment programs for adolescent sex offenders that include attention to AIDS prevention and transmission.

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CHAPTER 7

ADOLESCENTS WITH AIDS IN FOSTER CARE: A Case Report

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The Professional Parenting program, at the request of the North Carolina Division of Social Services, recently agreed to undertake foster family programming for children and adolescents with AIDS. The Division's request was precipitated by a series of difficulties it had encountered in attempting to place a homeless, delinquent, sexually active teenager with the disease. Among the myriad and often unique problems associated with the successful foster placement of this client was a special set of considerations and attendant tactics aimed at ensuring the protection of other young people in the youth's new school and community. This chapter describes and discusses these protection/prevention procedures and their effects during our 2-year tenure with this client, and provides some general guidelines for families, natural or surrogate, living with adolescents who have AIDS or have tested seropositive to the AIDS virus.

While the number of adolescents who have AIDS or are HIV-infected remains comparatively small, a percentage of this growing population requires placement outside of their natural homes and families. The need for such placements is rarely AIDS-related; rather, these youth, like their uninfected counterparts, are separated from fragmented or dysfunctional families or from families who lack the ability to manage their emotional or behavioral problems. But, unlike other problem teens, those with AIDS involvement present special placement and treatment complexities.

The primary purpose of this chapter is to review the circumstances and subtleties of the referral, placement, and successful care of one such youth--a homeless, occasionally delinquent, homosexually active teenager experiencing ARC symptoms at the time of his referral--by a special foster family. Secondarily, this chapter advocates generally for specialized foster care as the placement of choice for most displaced teens with problems who also have AIDS or are HIV-infected. The emphasis is on the steps that were taken--as well as the events that unfolded fortuitously--that combined to ensure both the compassionate care and treatment of this young man and the protection of the community in which he was placed. The remainder of this chapter is organized around a brief description of the program that accepted the responsibility for working with this child, a discussion of the history of his referral to this program, a description of the often delicate and sometimes discouraging process of preparing the community--especially the client's new school--for his arrival, and finally on the client himself and the exceptional foster family that opened its home and heart to him. We conclude our comments with an attempt to construct some relevant generalizations for any family coping with the special needs of a teenager with AIDS and the responsibility to protect the health of those in contact with that teenager.

The Professional Parenting Program

Professional Parenting is one of three youth care programs offered by the Bringing It All Back Home (BIABH) Study Center of Appalachian State University. While all youth served by the Study Center have serious emotional and/or behavioral problems, the assignment of individual children among these three programs is guided by their family situation. For youth referred to the Study Center whose problems are not serious enough to warrant their removal from their natural homes, BIABH offers Home Remedies, an intensive program of in-home services aimed at helping natural parents learn to use better and more effective parenting skills with their own children. Youngsters for whom there is reasonable hope of reunification with their natural families after a period of intensive, residential treatment are referred to BIABH group homes in their communities.

Some youths referred to the Study Center are functionally or literally homeless in addition to their myriad personal problems. County departments of social services or the juvenile courts have exhausted their typical placement resources for these young people and have been forced to consider institutional care or incarceration as a last option. For these youth, Professional Parenting offers long-term foster family treatment in the homes of carefully selected and specially trained couples (and, occasionally, single adults) willing to live and work with these youngsters through their age of majority.

As is true of most new ventures in human services, the Professional Parenting program evolved in response to a concrete need. That need had plagued the Study Center throughout the 1970s when the network of group homes constituted BIABH's only program. Group home admissions guidelines required that referred youth have a "permanent" family placement awaiting them after their group home treatment, but referrals poured in for youngsters who were otherwise eligible and who lacked the required exiting placement.

Group homes in different communities handled these "inappropriate" referrals in different ways. Some stood by their policy guidelines and refused them out of hand. Others accepted some of these youth in the hope that a viable exiting placement could be identified during the child's stay in the group home. Others accepted all such referrals out of benevolent desperation and wound up returning many of these youths to fragmented or dysfunctional natural families. We recognized the chaotic aspect of all this and, more important, knew that kids were falling through the cracks. The need was, thus, for an alternative program of permanent care and treatment for older, homeless, problem adolescents.

With encouragement from what was then the Center for Studies of Crime and Delinquency of NIMH, we undertook the development of such a program. Initially, we reasoned that the treatment of choice (and of least restrictiveness) for the substantial number of youths in this category would be permanent placement in a healthy family household with surrogate parents who were sufficiently motivated, well trained, and properly supported to manage the myriad problems these youths presented. We vaguely realized that the configuration of intervention we were describing was foster care, but we also knew that traditional foster care had fared poorly with this population. Something had to be different.

That something, we suspected, had to do with the commitment and competence of the surrogate parents, the level of their compensation, the extent and quality of their training, and the availability of continuing and comprehensive staff support service. The phrase we adopted to describe our task was, "Let's do foster care right," and we felt we had a leg up on the enterprise.

Having been at the forefront of the development and refinement of the behaviorally-based and nationally recognized Teaching-Family Model (TFM) for over a decade (Phillips et al. 1971; Wolf et al. 1972), we had at our disposal: (1) substantial experience in selecting qualified couples for work with problem teens; (2) a well-defined treatment model emphasizing family-based learning; (3) a comprehensive technology for training in the use of that treatment model; and (4) a history of success in the use of a concomitant support package for "teaching-parents" including regularly scheduled in-home consultation, 24-hour on-demand phone consultation, and a sophisticated system of improvement-centered evaluation. The program that emerged as Professional Parenting resulted from a systematic effort to retool the best features of the TFM of group home treatment for use by carefully selected couples willing to open their homes and families to problem teens in need of long-term care and treatment.

Owing to the original clinical training grant from NIMH, substantial subsequent transition funding from the Kate B. Reynolds Health Care Trust, and the continuing current support of the North Carolina Division of Social Services, Professional Parenting has operated since 1980 and presently provides placements for more than 40 clients throughout central and western North Carolina. Though the program remains learning based and support services oriented, its methods have been refined, and it is no longer closely linked to our also expanding network of group homes. We discovered early on that most of our Professional Parenting families could deal with most of the problems for which youths were referred to group homes without using that intervention. It is relevant that, prior to 1987, Professional Parenting did not accept younger children or clients with medical problems, but since then, the program not only accepts but invites the referral of youngsters of any age with special medical as well as emotional needs, e.g., clients with AIDS or fetal alcohol syndrome.

The Referral of Christopher

In the early winter of 1986, BIABH received a call from the Director of the North Carolina Division of Child and Family Services. That phone conversation was unusual and lengthy and began with the ominous statement, "We've got a problem." The purpose of the call was to implore the Study Center to consider the placement--preferably in its Professional Parenting program--of a homeless, delinquent teenager whom we shall call Christopher. Christopher was a transplant from New York City who, at the time of this first conversation, was in the custody of the Department of Social Services in a distant county outside the BIABH service area. Christopher had AIDS. Some other relevant features of that conversation centered on the recent events that led to the call and on the specifics of Christopher's long- and near-term social history. Several of these are tangentially relevant to this chapter.

First was the curious context, less than a year earlier, of Christopher's move from New York to North Carolina. Christopher had lived since birth with a woman whom he thought was his biological mother. At age 15, he was informed by this woman that she was not his mother but rather his aunt, that his mother had died when he was a child, that she (his aunt) was no longer willing to care for him, and that arrangements had been made for him to move to North Carolina to live with another aunt.

The problems that precipitated this scenario had begun several years earlier. Christopher recalls that he had his first homosexual experience in the fifth grade. In his early teens, he had begun roaming the streets, often against his aunt's wishes, and often into the late night. During this period, Christopher had many homosexual contacts: some with "boyfriends," others with "boys around the neighborhood." Christopher's school performance, which had been strong in the elementary grades, deteriorated, and staying out late escalated to staying out all night. And he would run away. When his New York aunt petitioned the court to have Christopher declared uncontrollable, descriptors like "runaway," "undisciplined," and "incorrigible" were entered into the record. Christopher was moved to North Carolina, but his continuing behavior problems quickly disrupted the living arrangements with the second aunt and he found himself in the custody of social services which placed him in a foster home.

Christopher developed his first symptoms and was definitely diagnosed as having AIDS while he was in this foster placement. Soon after that, the foster family complained that Christopher's behavior--not his medical condition--had pushed them to their limits; they were "fed up" and wanted Christopher removed from their home. At this point in the chronology, new descriptors appeared in Christopher's file, some confirmed or admitted, others alleged: "Petty theft (of $15.36)," "carrying a deadly weapon (a cutter designed for opening crates and boxes)," "breaking and entering (a car to steal a false pearl necklace)." There were also allegations of suicide attempts. It may be relevant to note here that when the staff of the Professional Parenting program reviewed these cumulative entries in Christopher's file, they judged his delinquency history per se as relatively minor and, in itself, no serious obstacle to his placement within the program. There was, in particular, neither documentation nor allegation of assaultive or aggressively antisocial behavior.

Concurrently, however, Christopher's absenteeism from the local high school had made him "eligible" for expulsion; curiously, however, he was not actually expelled (ostensibly for that absenteeism) until school personnel learned that he had AIDS.

Faced with the expelled student and an impatient foster family wanting to be rid of him, the local social services agency set about finding an alternative placement for Christopher, first within the county, then around the State, and finally outside the State. By the time they contacted the State Division of Child and Family Services, in some desperation, the local agency had unsuccessfully approached almost 200 different organizations in its effort to place Christopher.

Meanwhile Christopher, understandably depressed over his circumstances, had taken increasingly to the streets and had begun to physically neglect himself, eating poorly and often dressing in shirtsleeves even in the early winter weather. At the time of the State Division's call to Professional Parenting, Christopher had been hospitalized for non-pneumocystic pneumonia and a foresightful physician in charge of his care had determined that Christopher would quickly "self-destruct" if he returned to the streets. Despite his recovery from the pneumonia, that physician resolved not to discharge Christopher until a responsible placement had been found for him. Christopher's delinquent behavior had been sufficient--or at least could be documented as being sufficient--to qualify him for incarceration in training school, and that was the local agency's next alternative.

These, then, were the highlights, so to speak, of the Professional Parenting program's initial exposure to Christopher and to the prospect of working with him and, perhaps, other teenagers with AIDS.

Hard Choices

The decision to accept Christopher for program placement, which was made by the entire Professional Parenting staff, was neither quickly nor easily arrived at. Two points should be kept in mind concerning the process that led to that decision. First, despite the fact that Professional Parenting receives a substantial portion of its current funding through the State Division of Child and Family Services, the initial call from the Division Director concerning Christopher was matter-of-fact and without any pressure, subtle or direct, to accept his referral. The director simply conveyed that three programs within North Carolina had been identified as possible alternatives for Christopher and that Professional Parenting was at the top of that short list.

Second, the reader must remember that these events were unfolding in 1986 when the total information pool about AIDS and the HIV virus was far more murky than it is at present. Contradictory information about the disease was appearing in back-to-back issues of the same newspapers. Important decisions about Christopher's future were being made against the backdrop of such incidents like the one in Arcadia, Florida, in which three HIV-positive (though asymptomatic) hemophiliac brothers, age 8, 9, and 10, were initially denied entry into their local school and, following an effort to prepare for their admission, the school had to be evacuated because of bomb threats and the boys' home burned to the ground in a fire of unknown origin. Simultaneously, predictions (some of them from the medical community) of an epidemic of AIDS among heterosexuals were rife. The average American had begun, understandably, to assume that medical science was still largely in the dark about the disease and that no information about it--no matter the source--could be relied upon.

In some respects, the Professional Parenting staff was slightly more knowledgeable than the man on the street. For one thing, we had already considered the reality that sooner or later AIDS would appear among the more than 100 teens placed in our sister group home program and that some unidentified seropositive youth might be with us already. Also, one staff member is a hemophiliac who had received substantial blood product during the high-risk period between 1978 and 1985 (i.e., before effective screening of the nation's blood supply) and, thus, had a more than passing interest in the extant information base concerning AIDS and its transmission. This individual was, understandably, one of the first among the staff to advocate for Christopher's placement within the program.

Fears and doubts among the collective staff, nevertheless, surfaced almost immediately. Examples: "We work closely with our (program) kids and their foster families--we often eat with them and have them over to our own homes;" "What about the safety of our own natural children?" "Recruiting program families is already hard enough, what will happen if word gets out that we're serving kids with AIDS?" and so on. In addition to these personal and professional concerns was the important question of the program's ability to guarantee the protection of the students and adults who would populate Christopher's new community. And what of the issue of liability if we failed?

There were also the very real practical questions, e.g., "Could we find a foster family that was both willing and able to live with a child with AIDS and responsibly monitor and manage his behavior?" Finally, the staff had to consider a philosophical/ethical aspect of the decision. We had, as a group and since the inception of the program, always embraced a quiet, internal motto. It was, and is: "We work with difficult kids with special problems." The single and vitally important decision made at this first meeting about Christopher was that we all needed to become better informed. With the help of information from the Centers for Disease Control, the Red Cross, local medical professionals, AIDS support groups, and the Comprehensive Hemophilia Center at the Bowman Gray School of Medicine (among other sources), we set about the task of learning the "truth" about AIDS.

The process of that learning was both informal and systematic. We knew that Christopher was still in the hospital and that his alternatives, if we chose to reject his referral, were limited and not inviting. The two most salient things decided early on were these: First, we would each be "on alert" for any information on the subject of AIDS and would share that information with other members of the staff (we constructed a scrapbook of articles on the subject and a modest library of videotapes of AIDS-related programs then appearing on television). Second, the subject of Christopher's referral specifically, and of accepting AIDS clients in general, became the first order of discussion at scheduled weekly staff meetings attended by all Professional Parenting personnel.

Gradually our fears and apprehensions were replaced by understanding. The HIV virus is not easily communicable. Intimate sexual contact is, by far, the most common vehicle of transmission. Families do not contract AIDS from routine, nonsexual contact with infected members. Predictions concerning the AIDS explosion among heterosexuals were just that, predictions. This process of self-education consumed 3 months. The staff, aware that it would face various sources and levels of resistance, knew that a half-hearted decision to work with Christopher would not do. The decision had to be not only affirmative, but aggressively enthusiastic. We would have to be upbeat and forcefully positive as we approached prospective foster families and the community at large.

In the final analysis, two considerations led to a unanimous staff decision to accept Christopher for program placement. One was serious reflection on the aforementioned staff motto or mission: "We're in the business of high-risk kids." The other was the simple reality that it was no longer a question of whether children with AIDS would require foster care but, rather, when that would happen. The decision was made, and it was made enthusiastically.

Staff and Community Preparation

Once the decision to place Christopher (and other children with AIDS) was made, issues of recruitment, matching, preparation, and support services had to be addressed. As is true in any foster care program, a pool of available families from which to choose an appropriate home for each client is ideal. Recruitment of families for Christopher began with existing program families. It proved important to resist the temptation to make decisions for a prospective family based on its willingness to work with HIV clients; several were initially interested in Christopher, for example. We found it better to give qualified families the option to decide for themselves.

Once a prospective family for Christopher was identified, the style of presentation of the issues to that family proved critical. An upbeat, enthusiastic approach helped set the mood from the beginning. Information about the disease was presented, although it was surprising how well informed many of our families already were. Families then needed to think and decide, and we encouraged them to feel that it was acceptable to say no. We let them know that they would be trained on household precautions and who would be available for support. Families were prepared for issues of death and loss and were told that death by AIDS is usually unpleasant. Confidentiality was stressed, although we explained that it would be tempting to tell friends, neighbors, and relatives. Prospective families were counseled on who can be informed and how to handle various reactions. And compensation was discussed. Monthly payments to families caring for these children would range from $1,000 to $1,500 (substantially more than for clients without medical difficulties), depending on the amount of time required to provide care for the child.

The Issue of Liability

A recurring concern among agency staff and families considering the placement of AIDS children is liability. Since the placement of such youth in foster care is new, legal precedents for liability remain to be established. In the absence of such precedents, program staff arranged a meeting among various State-level officials and staff, including two attorneys from the Governor's Office, for general guidance in the matter. The discussion addressed various aspects of this complex issue, but the resulting recommendations were straightforward. First, we were advised to inform any prospective foster parents that the client they were considering has AIDS and review for them what potential social and health risks this might pose for family members. Second, we were advised to have these parents sign statements that they had been given, and had understood, the information concerning these potential risks.

Since Professional Parenting has a private board of directors that provides the auspices of the foster care licensure of our families, their approval and blessing in this matter was needed. The board as a whole was mainly concerned with liability and with acceptance of Christopher by the community if it learned of the nature of his placement. As with most volunteer boards, this particular board of directors is made up of community-minded, child-oriented people. They want to serve needy children, but were being asked to go beyond the call of duty when considering taking on the risks of placement of AIDS children. The key was the willingness and commitment of a family able to work with Christopher. Board members felt that if families were willing to take on the real challenge of living with children with AIDS, they, the Board, should be willing to assume some of the legal risks. Board members went through the predictable process of reacting initially to the fear and then prevalent uncertainty surrounding AIDS, then educating themselves and slowly resolving the issues in their own minds. One member of the board did quit when agreement was reached to invite Christopher's placement.

Our next major task was to determine what information, if any, concerning Christopher needed to be shared with the school where he was to be enrolled. We approached a senior public health official in the community in this matter and were advised that: (1) this school system had not previously enrolled a student known to have AIDS; but (2) the system had formally adopted recently issued North Carolina Department of Public Instruction guidelines on students with communicable diseases. That policy, among other things, stated that children with AIDS can and will be served in the public schools as long as medical personnel determine that such students are able to do so without creating potential harm to themselves or other students. The implications for disclosure, thus, remained unclear, and a committee was formed of the local health official, the school superintendent, a medical doctor familiar with Christopher's case, Christopher's legal guardians, and various school personnel to evaluate the situation with respect to Christopher and subsequent students with AIDS or known to be HIV-infected.

After substantial deliberation leading to various decisions, that committee adopted a two-level approach relating to any student with AIDS, but precipitated by Christopher's imminent enrollment. First, all teachers within the school system would be trained on the policy of handling body fluids with all students. Because not all AIDS carriers or other victims of communicable diseases, such as hepatitis, are aware of their conditions, rubber gloves were to be worn at any time it was necessary to handle the body fluids of another person, be those blood, vomitus, or whatever. Second, it was decided to inform all teachers who would have HIV-positive students in their classes about those students' conditions. Confidentiality was stressed. Professional Parenting staff were instrumental in helping the school establish policy and practices and aided in establishing a supportive mood and upbeat attitude toward Christopher by those who were told he had AIDS. While individual school personnel expressed continuing concern for the safety of other children, apprehensions over later community reaction and, to a lesser degree, fears about their personal well-being, the faculty was, as a group, receptive and supportive.

A programmatic decision was made against informing the other foster parents in our program (who were not working with AIDS children) that such children were to be admitted into our program. This decision was made to honor the confidentiality rights of all clients and their foster families. However, a special inservice training session was conducted on the subject of AIDS to disseminate general information and, we hoped, to allay fears born of misinformation.

Christopher and Carrie

Concurrent with the foregoing activities involving the new community and school, program staff worked hard to identify not just *a* family for Christopher, but the *right* family. That hard work--and a great measure of good luck--led us to Carrie, a single female, living, at that time, with her natural, teenage daughter. Carrie had been previously trained and licensed to work as a Professional Parent but, more important, had struck the staff as possessing a unique combination of talents with respect to children. She was a sincere and abundantly loving person but was, at once, exceptionally skilled in communicating with teens and setting and enforcing limits with them. Beyond these attributes, Carrie was broadly and accurately informed about AIDS and was almost instantly excited about the prospect of working with a child with AIDS. For our part, we were concerned with questions of willingness, commitment, emotional stability, high energy, skill at youth behavior management, and an understanding of the myriad special implications of living with a youth with AIDS. In a phrase, Carrie filled the bill, and after she had a chance to discuss the possibility of Christopher's placement with other members of the household, arrangements were made for a trial visit by Christopher in her home.

Staff would not learn until much later how pithy that first visit was. Partly at our instruction and partly of her own volition, Carrie spoke openly with Christopher about his condition from their first meeting. Beyond that, they talked about Christopher, his life, his expectations, Carrie's expectations, about sex, about teenagers in general, and, above all, about teenagers with AIDS and their responsibilities to society. We were also to learn later that it was Christopher's openness to this dialog, and his specific responses to various of her pointed questions, that convinced Carrie she could live and work productively with Christopher.

As had we, she found Christopher to be a responsive, intelligent, open young man who was indeed sensitive to the implications of his medical condition. Apart from the fact that the all-important placement had been arranged, a relationship was begun. Christopher was still a street kid with a special problem, but he quickly sensed that he was in the environs of someone who might truly care about his welfare and who would help when help was needed. He also quickly judged that, in his own later words,"...this is a tough lady who won't put up with much nonsense."

Rules were laid down; conditions specified by the school regarding Christopher's behavior were read and reviewed. And there were, Christopher recalls, all of the "What if..." questions. "What if you're physically attracted to someone?" "What if someone tries to encourage you into sexual contact?" "What if you get hurt and are bleeding?" Christopher either had the answers right or quickly got them right with Carrie's help. That he had truly inculcated this and was not simply mouthing the right words was borne out in several ways, though all of them somewhat anecdotal. For example, shortly after he was installed in Carrie's home, the family made a day visit to an amusement park in a nearby city. An odd accident while riding the bumper cars caused an injury to Christopher which resulted in some temporarily profuse bleeding. Carrie saw the incident but could not reach Christopher immediately. When she did break through the crowd, she found that Christopher had retreated from several adults who were offering to help with a simple admonishment that he was OK, that he could handle the problem, and that they should stay away from him. On another occasion, Carrie cut herself with a kitchen knife while Christopher was at home. She later recalled reminding him that open wounds were something he'd always have to be careful of and that he had replied, "I know. I wouldn't want what I have to happen to anyone, especially to you."

Over a year later, arrangements were made (with both Christopher's and Carrie's consent) for a candid, taped interview with Christopher about AIDS, sex, and his reactions to his lifestyle while living with Carrie. The interview was to be conducted by a staff researcher with Professional Parenting and might have been conducted one-on-one. Christopher, however, knowing the proposed content of the discussion, openly invited both Carrie and his case manager (also Program Director) to be present and to participate. Without delving into confidential specifics, it was the uniform opinion of all the adults present that Christopher's answers to questions about all topics were given with absolute candor. Christopher's single current sexual outlet was masturbation. No, he had not tried phone sex (either the commercial variety or with friends), but that wasn't a bad idea. If he ever felt compelled to have sexual contact with someone, he would tell them he had AIDS ("That should take care of that!"). Yes, Carrie had explained all about condoms and had offered to take him to the drugstore "just in case," but, no, he didn't think things would ever go that far. And the conversation continued...for 3 revealing hours.

We do not offer the above as definitive evidence of the veracity of Christopher's responses to our questions or, in general, that Christopher has not or will not present a health or safety threat to his current community. But his observed behavior--and his behavior has been closely and regularly monitored as a matter of program policy--corresponds nearly perfectly with what he told us during this rather remarkable interview.

WHAT WE HAVE LEARNED

It is difficult, if not unwise, to attempt to extrapolate a set of recommendations from a single, clinical experience, especially one as unusual at this. Our intent here is to share what we think might be of use to others facing similar circumstances, and we shall try.

Bonding and Foster Care

Notwithstanding our obvious prejudices, we are currently convinced that foster care may be the best, and perhaps the safest, placement alternative for teens with AIDS. Young people in institutions and other residential group care facilities do not readily form significant attachments to adults around them (for reasons to do with shift staffing, among other things); nor do many youths in foster care. But foster families can encourage bonding; and, when it happens, foster youth begin to ask the important private question, as it appears Christopher has, "I wonder what Carrie would think if I...?" when they are not under the immediate supervision of their foster parents. But the bonding associated with good foster care can provide far more than bolstered behavioral controls. It can provide terminally ill children with a sense of belonging, give them respect and dignity, and offer higher levels of attention and privacy than they would receive in group care. And this respite, solace, and succor that only a small, family setting can afford, is desperately needed by high-risk seriously emotionally disturbed children, especially those who are HIV infected.

Teens With AIDS Need the Best of Foster Care

The fairly recent notion of Foster Family Treatment (FFT) was conceived to qualify as "foster care done right." Professional Parenting, an example of FFT, was designed to overcome the usual weaknesses of traditional foster care, among these crippling caseloads, indifferent or haphazard family selection, token training, sketchy staff support services, and nominal financial reimbursement to parents. The difference, in Christopher's particular case, translates as follows: Instead of sharing a program manager with 20, 40, or 50 other foster families, Christopher's program manager was able to give over 25 percent of his time to his and Carrie's needs and problems, and a second, backup program manager was always available as well. Carrie and her family were vigorously screened to ensure suitability for the program, and, later, for Christopher's care in particular. The program provided Carrie with extensive hands-on training in dealing with the problems of difficult teens and arranged special training for her concerning AIDS and Christopher's special needs in that regard.

Christopher's final placement with Carrie was the last step in a rigorous matching process that entailed numerous briefings (of Christopher as well as Carrie and her family), several conversations among the principals in the case, as well as trial visits to gauge the "chemistry" of the match. Finally, the amount of the cost-of-care payments arranged for Carrie was meaningful and intended not only to meet, but to exceed, the anticipated expenses associated with Christopher's care. Finally, in terms of staff support, Carrie and Christopher know that they will never be farther than a phone call away from the full and individual attention of a program staff member knowledgeable about their family and special circumstances; a real person--not an answering machine--night or day, 7 days a week.

It is our current view that homeless teens with AIDS require exactly this level of enterprise: the very best that foster care can offer.

Foster Care for Youths With AIDS Is Not Easy--But It's Not Impossible

Having placed, since Christopher, two infants with AIDS, we would offer that the difficulty an agency faces in placing teens with AIDS is far greater than that of placing and managing inflicted toddlers. Certainly, some of the special complexities surrounding Christopher's placement related directly to the fact that he was our first AIDS client and that we had not begun preparation for AIDS clients until he was referred to us. (An aside on this point is that the time, effort, and difficulty surrounding Christopher's placement would have been substantially reduced had we undertaken such preparation prior to his referral to us. In this vein, we strongly recommend that other agencies and organizations who might find themselves considering the referral of AIDS clients would do well to undertake formalized staff training as well as preliminary policymaking on AIDS in advance of actual AIDS referrals. Many of the decisions we had to make and much of the work surrounding Christopher's placement would have been better accomplished in advance and, thus, in a less urgent atmosphere.) Even with such preparation, however, it is the teens who evoke realistic fears concerning sex and drugs, and because of their relative mobility, they also inherently present far greater monitoring and management complexities than do younger children.

Related to these special complexities, it is a lot easier to train prospective foster parents or other care providers in the health-related aspects of AIDS than it is to groom them to properly meet the emotional and behavioral needs of teenagers with AIDS. In the search that led us to Carrie, for example, we were far more vigilant for candidates--and there were only two--who possessed that delicate combination of genuine compassion and caring for kids and the ability to deal with them honestly (and firmly when necessary) than we were for parents with medical training or an already well-developed information base about AIDS. In fact, concerning medical experience or knowledge about AIDS, the most important attribute that Carrie presented was a healthy skepticism about some of the strange things that were then appearing in the media about AIDS and a general absence of incorrect prejudices about the disease. More important, she obviously liked kids, had a knack for communicating openly with them and gaining their trust, and seemed to have strong, natural parenting skills. She was also utterly unruffled by the fact of Christopher's homosexuality.

The Key for Communities is Education

Accurate information about AIDS and its implications is the single most important tool agencies have in mounting local programs for clients with the disease. In the case of Christopher, Professional Parenting had to assume some responsibility for that education. To reiterate, that task might have been better and more easily accomplished had it been undertaken before Christopher was referred to us. While his referral provided the impetus to act, the urgency it created mitigated against careful planning of our community education efforts. It also invited passion at various decision points where reason and calm might have been more helpful.

In point of fact, we learned from our mistakes and have undertaken a broad-based program of AIDS education within our extensive network of group homes. This educational effort has been incorporated into the regular inservice training we provide the staff of these group homes and has involved the use of commonly available materials such as the publication *Understanding AIDS*, as well as presentations by professionals from the medical community. In addition to simple edification about AIDS, this training has led to the development of policy concerning both the care of AIDS clients in group homes and the need for the rigorous protection of these clients' confidentiality when they are referred to our programs. In the absence of extant clients awaiting immediate placement, this training has benefited from thoughtful, unrushed preparation and has been mounted in a rational, dispassionate atmosphere.

The Key for Families Is Communication

It bears repeating that, while we would quickly assign skill at behavior management to second place, the single most important talent a foster (or natural) parent can bring to the task of living with a teen with AIDS is the ability to communicate openly, honestly, and directly about the disease and its implications for those who have it and those around them. Without that communication, bonding is impossible, management becomes more difficult, and the foster placement becomes a place to eat and sleep and worry rather than a home and family.

Afterword

In February 1988, the North Carolina General Assembly enacted legislation that, had it been in place at the time, would have probably altered the course of events just described. Under this legislation, notification of Christopher's condition would still have been made to the local public health director. He would then have determined whether Christopher represented a "significant health risk" to the staff or students at his new school. Only if that determination were affirmative would a course of action approximating what actually transpired have been followed. Had the determination been--as it likely would be now--that Christopher did not present a significant health risk, the school system would not have been notified of Christopher's condition.

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KNOWLEDGE DEVELOPMENT WORKSHOP

"Issues in Prevention and Treatment of AIDS Among Adolescents with Serious Emotional Disturbance"

List of Speakers

1. Gerald R. Adams, Ph.D.
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Topic: Ideological and Interpersonal Identity Formation During Adolescence: Implications for Risk of Contracting AIDS

2. Hortensia Amaro, Ph.D.
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Topic: Drug Use Among Adolescent Mothers: A Profile of Risk for AIDS

3. Ann W. Burgess, R.N., D.N.Sc.
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Topic: AIDS and the Sexually Abused Adolescent

4. Adolph E. Christ, M.D., D.N.Sc.
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Topic: General and Specific Intervention Strategies with Emotionally Disturbed Adolescents

5. Nicolette Collins, M.D.
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Topic: AIDS Education and Prevention in Runaway and Street Youth

6. Ralph J. DiClemente, Ph.D.
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Topic: Prevalence of High Risk Behavior Among Psychiatrically Disturbed Adolescents

7. Peggy C. Giordano, Ph.D. (co-presenter)
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H. Theodore Groat, Ph.D. (co-presenter)
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Topic: AIDS Among Adolescent Subgroups: Inferences from Research and Theory on Delinquency and Sexuality

8. Hope Hill, Ph.D.
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Topic: Psychosocial Issues in the Prevention and Treatment of AIDS in Emotionally Disturbed Black Adolescents

9. Sonia Hinds, M.S.N.
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Topic: Critical Issues in Sexuality on an Inpatient Psychiatric Unit for Children and Adolescents

10. Robert Jones, Ph.D. (co-presenter)
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Bonnie Judkins, M.A. (co-presenter)
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Topic: Adolescents with AIDS in Foster Care: A Case Report

11. Cheryl Koopman, Ph.D.
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Topic: Factors Stopping Runaway Youth from Engaging in Safe Sex and Drug Abuse Behaviors

12. Gary B. Melton, Ph.D.
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Topic: Ethical and Legal Issues in Research and Intervention

13. Jon Rolf, Ph.D.
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Topic: Issues in AIDS Prevention Among Juvenile Offenders

14. Arlene R. Stiffman, Ph.D.
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Topic: High Risk Youths Who Use Health Clinics: A Profile of a Population Accessible for AIDS-Related Interventions